



# ***STIC Search Report***

## ***Biotech-Chem Library***

STIC Database Tracking Number: 125497

TO: Ruixiang Li  
Location: REM-4d75&4C70  
Art Unit : 1646 —  
Tuesday, June 29, 2004  
  
Case Serial Number: 09/742684

From: Toby Port  
Location: Biotech-Chem Library  
REM-1A59  
Phone: (571) 272-2523  
[toby.port@uspto.gov](mailto:toby.port@uspto.gov)

### Search Notes

GenCore version 5.1.6  
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CM protein - protein search, using sw model

Run on: June 28, 2004, 09:48:46 ; Search time 23 Seconds  
(without alignments)  
1151.484 Million cell updates/sec

Title: US-09-742-684A-16  
Perfect score: 2770  
Sequence: 1 MGAARKLAFVFLISCSGA.....IVTVMTNVDPPPKESL 513

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA:\*  
1: /cgn2\_6/protdata/2/iaa/5A COMB.pep.\*  
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pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2763	99.7	513	2 US-08-357-533A-10	Sequence 10, Appl
2	2763	99.7	513	2 US-08-459-009-10	Sequence 10, Appl
3	2763	99.7	513	2 US-08-300-584-2	Sequence 2, Appl
4	2763	99.7	513	3 US-08-459-951-10	Sequence 10, Appl
5	2763	99.7	513	3 US-08-738-168B-13	Sequence 13, Appl
6	2763	99.7	513	3 US-08-476-123-2	Sequence 2, Appl
7	2749	99.2	521	3 US-08-738-168B-5	Sequence 5, Appl
8	2482	89.6	514	3 US-08-738-168B-15	Sequence 15, Appl
9	1971.5	71.2	510	2 US-08-300-584-4	Sequence 4, Appl
10	1971.5	71.2	510	3 US-08-476-123-4	Sequence 4, Appl
11	1931	69.7	536	2 US-08-357-533A-12	Sequence 12, Appl
12	1931	69.7	536	2 US-08-459-009-12	Sequence 12, Appl
13	1931	69.7	536	3 US-08-459-951-12	Sequence 11, Appl
14	1915.5	69.2	513	2 US-08-357-533A-11	Sequence 11, Appl
15	1915.5	69.2	513	2 US-08-459-009-11	Sequence 11, Appl
16	1915.5	69.2	513	3 US-08-459-951-11	Sequence 11, Appl
17	1702	61.4	323	3 US-08-158-735A-12	Sequence 12, Appl
18	1147.5	41.4	516	2 US-08-357-533A-2	Sequence 2, Appl
19	1147.5	41.4	516	2 US-08-459-009-2	Sequence 2, Appl
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23	775.5	28.0	567	2 US-08-459-009-9	Sequence 9, Appl
24	775.5	28.0	567	2 US-08-445-520B-9	Sequence 1, Appl
25	775.5	28.0	567	2 US-08-737-045-1	Sequence 1, Appl
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Query Match 99.7%; Score 2763; DB 2; Length 513;  
Best Local Similarity 99.4%; Pred. No. 1.1e-263;

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29 775.5 28.0 567 3 US-08-446-938B-8 Sequence 8, Appl  
30 775.5 28.0 567 3 US-09-183-543-8 Sequence 8, Appl  
31 775.5 28.0 567 3 US-08-446-936A-8 Sequence 8, Appl  
32 775.5 28.0 567 4 US-09-239-864A-11 Sequence 11, Appl  
33 775.5 28.0 567 4 US-09-878-905-11 Sequence 11, Appl  
34 775.5 28.0 567 5 PCT-US92-09326-4 Sequence 4, Appl  
35 775.5 28.0 582 4 US-08-334-179A-2 Sequence 4, Appl  
36 775.5 28.0 1038 4 US-08-334-179A-2 Sequence 2, Appl  
37 770.5 28.0 1038 4 US-09-908-500A-2 Sequence 2, Appl  
38 770.5 27.8 1038 4 US-08-334-179A-8 Sequence 8, Appl  
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40 731.5 26.4 565 2 US-08-459-009-9 Sequence 9, Appl  
41 731.5 26.4 565 3 US-08-459-951-9 Sequence 9, Appl  
42 717.5 25.9 325 3 US-08-158-735A-13 Sequence 13, Appl  
43 674 24.3 532 2 US-08-481-337A-6 Sequence 6, Appl  
44 674 24.3 532 3 US-09-382-256-6 Sequence 6, Appl  
45 674 24.3 532 3 US-09-395-115-6 Sequence 6, Appl

## ALIGNMENTS

RESULT 1  
US-08-357-533A-10  
; Sequence 10, Application US/08357533A  
; Patent No. 5831050  
; GENERAL INFORMATION:  
; APPLICANT: JIN, DONALD F  
; APPLICANT: OPPERMAN, HERMANN  
; APPLICANT: KUBERASAMPATH, THANGAVEL  
; APPLICANT: SMART, JOHN E  
; TITLE OF INVENTION: NOVEL MORPHOGEN CELL SURFACE RECEPTOR  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,  
; ADDRESS: INC  
; STREET: 45 SOUTH STREET  
; CITY: HOPKINTON  
; STATE: MA  
; COUNTRY: USA  
; ZIP: 01748  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA: US/08/357,533A  
; FILING DATE: 16-DEC-1994  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: KELLY, ROBIN D  
; REGISTRATION NUMBER: 34,637  
; REFERENCE/DOCKET NUMBER: CRP-073FW  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (508)-435-9001  
; TELEFAX: (508)-435-0392  
; INFORMATION FOR SEQ ID NO: 10:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 513 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; FEATURE:  
; NAME/KEY: Protein  
; LOCATION: 1..513  
; OTHER INFORMATION: /note= "MOUSE ACTIVIN RECEPTOR"  
US-08-357-533A-10

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## RESULT 2

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US-08-459-009-10
; Sequence 10, Application US/08459009
; Patent No. 5861479
; GENERAL INFORMATION:
; APPLICANT: JIN, DONALD F
; APPLICANT: OPPERMAN, HERMAN
; APPLICANT: KUBERASAMPATH, THANGAVEL
; APPLICANT: SMART, JOHN E
; TITLE OF INVENTION: NOVEL MORPHOGEN CELL SURFACE RECEPTOR
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,
; ADDRESSEE: INC
; STREET: 45 SOUTH STREET
; CITY: HOPKINTON
; STATE: MA
; COUNTRY: USA
; ZIP: 01748
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/459,009
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/357,533
; FILING DATE: 16-DEC-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: KELLY, ROBIN D
; REGISTRATION NUMBER: 34,637
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; REFERENCE/DOCKET NUMBER: CRP-073FW
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (508)-435-9001
; TELEFAX: (508)-435-0992
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 513 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..513
; OTHER INFORMATION: /note= "MOUSE ACTIVIN RECEPTOR"
US-08-459-009-10
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Query Match 99.7%; Score 2763; DB 2; Length 513;
Best Local Similarity 99.4%; Pred. No. 1.e-283;
Matches 510; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
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## RESULT 3

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US-08-300-584-2
; Sequence 2, Application US/08300584
; Patent No. 5885794
; GENERAL INFORMATION:
; APPLICANT: Mathews, Lawrence S.
; APPLICANT: Vale, Wylie W.
; TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF
; RECEPTOR(S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pretty, Schroeder, Brueggemann & Clark
; STREET: 444 South Flower Street, Suite 2000
; CITY: Los Angeles
; STATE: CA
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; COUNTRY: USA
; Zip: 90071
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/300,584
; FILING DATE: 02-SEP-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/880,220
; FILING DATE: 08-MAY-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/773,229
; FILING DATE: 09-OCT-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/698,709
; FILING DATE: 10-MAY-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Reiter, Stephen E.
; REGISTRATION NUMBER: 31,192
; REFERENCE/DOCKET NUMBER: P41 9806
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619-546-1995
; TELEFAX: 619-546-9392
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 513 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-300-584-2

Query Match 99.7%; Score 2763; DB 2; Length 513;
Best Local Similarity 99.4%; Pred. No. 1.1e-263;
Matches 510; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

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DB 1 MGAALKAFVFLISCSGAILGRSETQECLEFFNANWEKDRNTQTGVEPCYGDKKRRHC 60

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RESULT 4
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; Sequence 10, Application US/08459951
; Patent No. 6093547
; GENERAL INFORMATION:
; APPLICANT: JIN, DONALD F
; APPLICANT: OPPERMAN, HERMANN
; APPLICANT: KUBERASAMPATH, THANGAVEL
; APPLICANT: SMART, JOHN E
; TITLE OF INVENTION: NOVEL MORPHOGEN CELL SURFACE RECEPTOR
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,
; ADDRESS: INC
; STREET: 45 SOUTH STREET
; CITY: HOPKINTON
; STATE: MA
; COUNTRY: USA
; ZIP: 01748
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/459,951
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/357,533
; FILING DATE: 16-DEC-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: KELLY, ROBIN D
; REGISTRATION NUMBER: 34,637
; REFERENCE/DOCKET NUMBER: CRP-073FW
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (508)-435-9001
; TELEFAX: (508)-435-0992
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 513 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURES:
; NAME/KEY: Protein
; LOCATION: 1..513
; OTHER INFORMATION: /note="MOUSE ACTIVIN RECEPTOR"
; US-08-459-951-10

Query Match 99.7%; Score 2763; DB 3; Length 513;
Best Local Similarity 99.4%; Pred. No. 1.1e-263;
Matches 510; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 MGAALKAFVFLISCSGAILGRSETQECLEFFNANWEKDRNTQTGVEPCYGDKKRRHC 60
DB 1 MGAALKAFVFLISCSGAILGRSETQECLEFFNANWEKDRNTQTGVEPCYGDKKRRHC 60

QY 61 FATWKNIISGSIIVKQGWLDDINCVDRTDCVKKDSPEVYFCCCEGNKCNKFSYFPEM 120
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QY 121 EVTQPTSNPTPKPPYNNILLYSLVPLMLIAGIVICAFWVYRHHKWAYPPVLVPTQDGP 180
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## RESULT 5

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; Sequence 13, Application US/08738168B  
; Patent No. 6132988  
; GENERAL INFORMATION:  
; APPLICANT: Sugino, Hiromu  
; APPLICANT: Nakamura, Takamori  
; APPLICANT: Shouji, Hiroki  
; TITLE OF INVENTION: NEURONAL CELL-SPECIFIC RECEPTOR PROTEIN  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP  
; STREET: 130 Water Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: USA  
; ZIP: 02109

COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent-In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/738,168B  
; FILING DATE: 25-OCT-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: JP 280939/1995  
; FILING DATE: 27-OCT-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: JP 174909/1996  
; FILING DATE: 04-JUL-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Resnick, David S.  
; REGISTRATION NUMBER: 34,235  
; REFERENCE/DOCKET NUMBER: 342/46901  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-523-3400  
; TELEFAX: 617-523-6440  
; INFORMATION FOR SEQ ID NO: 13:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 513 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-738-168B-13

Query Match 99.7%; Score 2763; DB 3; Length 513;  
Best Local Similarity 99.4%; Pred. No. 1.1e-263;  
Matches 510; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 MGAARKLAPVFLISCSGAILGRSETQCLFFNANWERDRTNQTGVPCYGDKDRHC 50

DB 1 MGAARKLAPVFLISCSGAILGRSETQCLFFNANWERDRTNQTGVPCYGDKDRHC 60  
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DB 121 EVTOPTSNPVPKPPYNNILLYSLVPLMLIAGIVICAFVWYVRRHKMAYPPVLVPTQDPGP 180  
QY 181 PPPSPLGLKPLQLLEVKARGPCVWKAQLNLYVAVKIPPIQDKOSWQNEVEYVSLPG 240  
DB 181 PPPSPLGLKPLQLLEVKARGPCVWKAQLNLYVAVKIPPIQDKOSWQNEVEYVSLPG 240  
QY 241 MKHENILQFICAEKRGTSVDVLDLITAFHEKSGSLDFLKVNVSMNOLCHIAETMARGL 300  
DB 241 MKHENILQFICAEKRGTSVDVLDLITAFHEKSGSLDFLKVNVSMNOLCHIAETMARGL 300  
QY 301 AYLHEDIPLGDKGHPAISHERDIKSNVLLKNNLTACIADFGALKFEAGKSAGTHGQV 360  
DB 301 AYLHEDIPLGDKGHPAISHERDIKSNVLLKNNLTACIADFGALKFEAGKSAGTHGQV 360  
QY 361 GTRRYMAPVLEGAINFQDADFRLIDMYAMGLVLMELASRCTAAGDPVDEYMLPFEERIG 420  
DB 361 GTRRYMAPVLEGAINFQDADFRLIDMYAMGLVLMELASRCTAAGDPVDEYMLPFEERIG 420  
QY 421 QHPSLEDMQEVVVHKKRPVLRDYMCKHAGMAMLCETIEECWDHDAEARLSAGCVGERIT 480  
DB 421 QHPSLEDMQEVVVHKKRPVLRDYMCKHAGMAMLCETIEECWDHDAEARLSAGCVGERIT 480  
QY 481 QMORLTNIITTEDIVTVMTVNTVDFPPKSSSL 513  
DB 481 QMORLTNIITTEDIVTVMTVNTVDFPPKSSSL 513

## RESULT 6

US-08-476-123-2  
; Sequence 2, Application US/08476123  
; Patent No. 6162896  
; GENERAL INFORMATION:  
; APPLICANT: Mathews, Lawrence S.  
; APPLICANT: Vale, Wylie W.  
; APPLICANT: Tsuchida, Kunihiro  
; TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF  
; TITLE OF INVENTION: RECEPTOR(S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY  
; NUMBER OF SEQUENCES: 14  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Pretty, Schroeder, Brueggemann & Clark  
; STREET: 444 South Flower Street, Suite 2000  
; CITY: Los Angeles  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 90071  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent-In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/476,123  
; FILING DATE: 07-JUN-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/485,061  
; FILING DATE: 07-JUN-1995  
; APPLICATION NUMBER: US 08/300,584  
; FILING DATE: 02-SEP-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/880,220  
; FILING DATE: 08-MAY-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/773,229

FILING DATE: 09-OCT-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/698,709  
FILING DATE: 10-MAY-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Reiter, Stephen E.  
REGISTRATION NUMBER: 31,192  
REFERENCE/DOCKET NUMBER: P41 9927  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-546-4737  
TELEFAX: 619-546-9392  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 513 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-476-123-2

Query Match 99.7%; Score 2763; DB 3; Length 513;  
Best Local Similarity 99.4%; Pred. No. 1.1e-263;  
Matches 510; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 MGAALKAPAVFLISCSGAILGRSETQCLFFNANWEDRTNQTGVPCYGDKRRHC 60  
DB 1 MGAALKAPAVFLISCSGAILGRSETQCLFFNANWEDRTNQTGVPCYGDKRRHC 60  
QY 61 FATWKNISSIEIVKQGCWLDINCVDRTDCVKKDSPEVYFCCCEGNMCKEFSYFPEM 120  
DB 61 FATWKNISSIEIVKQGCWLDINCVDRTDCVKKDSPEVYFCCCEGNMCKEFSYFPEM 120  
QY 121 EVTQPTSNPTKPPYNNILLYSLVPLMLIAGIVICAFWYRHHKMAYPVLVPTQDPGP 180  
DB 121 EVTQPTSNPTKPPYNNILLYSLVPLMLIAGIVICAFWYRHHKMAYPVLVPTQDPGP 180  
QY 181 PPSPLILGLKPLQLLEKARGFCVWKAQLLNEYVAVKIFPIODKQSQWNEVEVYSLG 240  
DB 181 PPSPLILGLKPLQLLEKARGFCVWKAQLLNEYVAVKIFPIODKQSQWNEVEVYSLG 240  
QY 241 MKHENILQIFGAEKRGTSVDVLDLITAFHEKGSLSDFLKANVSNLCHIAETMARGL 300  
DB 241 MKHENILQIFGAEKRGTSVDVLDLITAFHEKGSLSDFLKANVSNLCHIAETMARGL 300  
QY 301 AYLEDIPGLKQGHKPAISHRDISKKNVLLKNNLTACTIADFGALKEAGKSGDTHGQV 360  
DB 301 AYLEDIPGLKQGHKPAISHRDISKKNVLLKNNLTACTIADFGALKEAGKSGDTHGQV 360  
QY 361 GTRRYMAPEVLEGAINFORDAFLRIDMYAMGLVWLWELASRCTAAGDPVDEYMLPFEETG 420  
DB 361 GTRRYMAPEVLEGAINFORDAFLRIDMYAMGLVWLWELASRCTAAGDPVDEYMLPFEETG 420  
QY 421 QHPSLEDQVYVHKKRPVLRDYWQKHAGMAMLCETIEECWHDHAEARLSAGCVGERIT 480  
DB 421 QHPSLEDQVYVHKKRPVLRDYWQKHAGMAMLCETIEECWHDHAEARLSAGCVGERIT 480  
QY 481 QMORLNITTEDIVTVVTVMTNVNDFPPKESL 513  
DB 481 QMORLNITTEDIVTVVTVMTNVNDFPPKESL 513

## RESULT 7

US-08-738-168B-5  
Sequence 5: Application US/08738168B  
Patent No. 6132988  
GENERAL INFORMATION:  
APPLICANT: Sugino, Hiromu  
APPLICANT: Nakamura, Takanori  
APPLICANT: Shouji, Hiroki  
TITLE OF INVENTION: NEURONAL CELL-SPECIFIC RECEPTOR PROTEIN  
NUMBER OF SEQUENCES: 15  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP  
STREET: 130 Water Street

CITY: Boston  
STATE: MA  
COUNTRY: USA  
ZIP: 02109  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/738,168B  
FILING DATE: 25-OCT-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 280939/1995  
FILING DATE: 27-OCT-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 174909/1996  
FILING DATE: 04-JUL-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Resnick, David S.  
REGISTRATION NUMBER: 34,235  
REFERENCE/DOCKET NUMBER: 342/46901  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617-523-3400  
TELEFAX: 617-523-6440  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 521 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-738-168B-5

Query Match 99.2%; Score 2749; DB 3; Length 521;  
Best Local Similarity 97.9%; Pred. No. 2.6e-262;  
Matches 510; Conservative 3; Mismatches 0; Indels 8; Gaps 1;

QY 1 MGAALKAPAVFLISCSGAILGRSETQCLFFNANWEDRTNQTGVPCYGDKRRHC 60  
DB 1 MGAALKAPAVFLISCSGAILGRSETQCLFFNANWEDRTNQTGVPCYGDKRRHC 60  
QY 61 FATWKNISSIEIVKQGCWLDINCVDRTDCVKKDSPEVYFCCCEGNMCKEFSYFPEM 120  
DB 61 FATWKNISSIEIVKQGCWLDINCVDRTDCVKKDSPEVYFCCCEGNMCKEFSYFPEM 120  
QY 121 EVTQPTSNPTKPPYNNILLYSLVPLMLIAGIVICAFWYRHHKMAYPVLVPTQDPGP 176  
DB 121 EVTQPTSNPTKPPYNNILLYSLVPLMLIAGIVICAFWYRHHKMAYPVLVPTQDPGP 180  
QY 177 ----DEGPPPPSPPLGLKPLQLLEKARGFCVWKAQLLNEYVAVKIFPIODKQSQWNE 232  
DB 181 IMIEDGPPPPSPPLGLKPLQLLEKARGFCVWKAQLLNEYVAVKIFPIODKQSQWNE 240  
QY 233 YEVYSLPGMKHENILQIFGAEKRGTSVDVLDLITAFHEKGSLSDFLKANVSNLCHIA 292  
DB 241 YEVYSLPGMKHENILQIFGAEKRGTSVDVLDLITAFHEKGSLSDFLKANVSNLCHIA 300  
QY 293 AETMARGLAFLYLEDIPGLKQGHKPAISHRDISKKNVLLKNNLTACTIADFGALKEAGK 352  
DB 301 AETMARGLAFLYLEDIPGLKQGHKPAISHRDISKKNVLLKNNLTACTIADFGALKEAGK 360  
QY 353 AGDTGQVGTTRYMAPEVLEGAINFORDAFLRIDMYAMGLVWLWELASRCTAAGDPVDEY 412  
DB 361 AGDTGQVGTTRYMAPEVLEGAINFORDAFLRIDMYAMGLVWLWELASRCTAAGDPVDEY 420  
QY 413 LPFEEIIGHPSLEDQVYVHKKRPVLRDYWQKHAGMAMLCETIEECWHDHAEARLSA 472  
DB 421 LPFEEIIGHPSLEDQVYVHKKRPVLRDYWQKHAGMAMLCETIEECWHDHAEARLSA 480  
QY 473 GCWGERITQMORLNITTEDIVTVVTVMTNVNDFPPKESL 513  
DB 481 GCWGERITQMORLNITTEDIVTVVTVMTNVNDFPPKESL 521

## RESULT 8

US-08-738-168B-15  
; Sequence 15, Application US/08738168B  
; Patent No. 6132988  
; GENERAL INFORMATION:  
; APPLICANT: Sugino, Hiromu  
; APPLICANT: Nakamura, Takamori  
; APPLICANT: Shouji, Hiroki  
; TITLE OF INVENTION: NEURONAL CELL-SPECIFIC RECEPTOR PROTEIN  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP  
; STREET: 130 Water Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: USA  
; ZIP: 02109  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/738.168B  
; FILING DATE: 25-OCT-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: JP 280939/1995  
; FILING DATE: 27-OCT-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: JP 174909/1996  
; FILING DATE: 04-JUL-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Resnick, David S.  
; REGISTRATION NUMBER: 34,235  
; REFERENCE/DOCKET NUMBER: 342/46901  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-523-3400  
; TELEFAX: 617-523-6440  
; INFORMATION FOR SEQ ID NO: 15:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 514 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-738-168B-15

Query Match 89.6%; Score 2482.5; DB 3; Length 514;  
Best Local Similarity 87.7%; Pred. No. 4.9e-236;  
Matches 451; Conservative 37; Mismatches 25; Indels 1; Gaps 1;  
QY 1 MGAARKLAFVFLISCSG-GAILGSETQCECLFFANWKEKRTNQTGVPCYGDKKRH 59  
DB 1 MGAATKLAFAVFLISCSGAGSILGSETRECIYYANWKEKRTNQTGVPCYGDKKRH 60  
QY 60 CFATWKNISGSIYKQGCWLDIDNCYDRTDCEKSDPSYVFCCEGMNCKEFSYPE 119  
DB 61 CFATWKNISGSIYKQGCWLDIDNCYKSKTEKSDPSYVFCCEGMNCKEFSYPE 120  
QY 120 MEVTOPTSNPTKPPYNYLLISLPLMLAGIVICAFYVYHHKMAYPVLPVTPDQG 179  
DB 121 MEVTOPTSNPTKPPYNYLLISLPLMLAGIVICAFYVYHHKMAYPVLPVTPDQG 180  
QY 180 PPPSPFLGLKPLQLLEVKARGFCVWKAQLNLEYVAVKIPFIQDKSQWNEYEVSLLP 239  
DB 181 PPPSPFLGLKPLQLLEVKARGFCVWKAQLNLEYVAVKIPFIQDKSQWNEYEVSLLP 240  
QY 240 GKHENILQFGAERGTGVSVDLMLITAFHEKSGSLDFLKANTVSNQLCHIAETWARG 299  
DB 241 GKHENILYFIGAERGTGVSVDLMLITAFHEKSGSLDFLKANTVSNQLCHIAETWARG 300  
QY 300 LAYLHEDIPLGDKGHPKPAISHRDIKSKNVLKNNLTACIADFGLALKEAGKSAGDTGQ 359

DB 301 LSHLHEDIPLGDKGHPKPAISHRDIKSKNVLKNNLTACIADFGLALKEAGKSAGDTGQ 360  
QY 360 VGTTRYNAPEVLECAINFORDAFLRIDMYAGLVLMELASRCTAAADGPVDEYMLPFREKI 419  
DB 361 VGTTRYNAPEVLECAINFORDAFLRIDMYAGLVLMELASRCTAAADGPVDEYMLPFREKI 420  
QY 420 GQHPSEDMQEVVVVHKRPVLRDYNQKHAGQAMLCETIETECWDHDAEALSLAGCVERI 479  
DB 421 GQHPSEDMQEVVVVHKRPVLRDYNQKHAGQAMLCETIETECWDHDAEALSLAGCVERI 480  
QY 480 TQCRLTNIITTDIDIVTVVTVNVDPPKESL 513  
DB 481 IQMQLTNIITTDIDIVTVVTVNVDPPKESL 514

## RESULT 9

US-08-300-584-4  
; Sequence 4, Application US/08300584  
; Patent No. 5885794  
; GENERAL INFORMATION:  
; APPLICANT: Mathews, Lawrence S.  
; APPLICANT: Vale, Willie W.  
; TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF  
; TITLE OF INVENTION: RECEPTOR(S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Pretty, Schroeder, Brueggemann & Clark  
; STREET: 444 South Flower Street, Suite 2000  
; CITY: Los Angeles  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 90071  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/300.584  
; FILING DATE: 02-SEP-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/880,220  
; FILING DATE: 08-MAY-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/773,229  
; FILING DATE: 09-OCT-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/698,709  
; FILING DATE: 10-MAY-1991  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Reiter, Stephen E.  
; REGISTRATION NUMBER: 31,192  
; REFERENCE/DOCKET NUMBER: P41 9806  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 619-546-1995  
; TELEFAX: 619-546-9392  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 510 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-300-584-4

Query Match 71.2%; Score 1971.5; DB 2; Length 510;  
Best Local Similarity 67.9%; Pred. No. 1.2e-185;  
Matches 349; Conservative 85; Mismatches 75; Indels 5; Gaps 3;

QY 1 MGAARKLAFVFLISCSGAILGSETQCECLFFANWKEKRTNQTGVPCYGDKKRH 60  
DB 1 MGAASVALTFLLLATFRAGSGHDEVETRECIYYANWKEKRTNQTGVPCYGDKKRH 60





STATE: MA  
COUNTRY: USA  
ZIP: 01748  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICANT: KUBERASAMPATH, THANGAVEL  
APPLICANT: SMART, JOHN E  
TITLE OF INVENTION: NOVEL MORPHOGEN CELL SURFACE RECEPTOR  
NUMBER OF SEQUENCES: 12  
FILING DATE: 16-DEC-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: KELLY, ROBIN D  
REGISTRATION NUMBER: 34,637  
REFERENCE/DOCKET NUMBER: CRP-073FW  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (508)-435-9001  
TELEFAX: (508)-435-0992  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 536 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
FEATURE:  
NAME/KEY: Protein  
LOCATION: 1..536  
OTHER INFORMATION: /note= "HUMAN ACTIVIN TYPE II  
OTHER INFORMATION: RECEPTOR"  
US-08-357-533A-12

Query Match 69.7%; Score 1931; DB 2; Length 536;  
Best Local Similarity 64.7%; Pred. No. 1.3e-181;  
Matches 343; Conservative 86; Mismatches 77; Indels 24; Gaps 2;  
  
QY 8 AFAPVLISCSGAILGRSETQECLEFFNANWEKDRNTQGTVPYCGDKKRRHCHFCATWNI 67  
DB 7 ALALLWGLCAGSGRGEATRECIYNNANWELERTNQSLERCEGEQDKRLHCYASWANS 66  
  
QY 68 SGSTIEIVKQGWLDINDCYDRDTCVEKXDSSEVYFCCCEGNCNKEKPSYFPEMEVQTPTS 127  
DB 67 SGSTIEIVKQGWLDINDCYDRDTCVEKXDSSEVYFCCCEGNCNKEKPSYFPEMEVQTPTS 126  
  
QY 128 NPVTPEKPYNNILLYSLVPLMLIAGIVICAFNVRHHRMAYPPVLV 173  
DB 127 EPPPTAPTLTLLVAYSLPIGGLSLVLLAFNWRHRRPPYGHVDIHEVRQCORWAGRRD 186  
  
QY 174 -----PTQDPGPPPPPLGLKPLQLLELVKARGSPGVKQAQLNVEYVAKIPPIQ 224  
DB 187 GCADSFKPLFPDPPGPPPLGLKPLQLLELVKARGSPGVKQAQLNVEYVAKIPPIQ 246  
  
QY 225 DKQSWNEVYVSLPCMKHENTLOPIGAEKGTSDVDVLDLITAFHEKGSLSDELKANVV 284  
DB 247 DKQSWNEVYVSLPCMKHENTLOPIGAEKGTSDVDVLDLITAFHEKGSLSDELKANVV 306  
  
QY 285 SWNLCHIAETMARGLAYLHEDIPLGLK-DGKPAISHRDIKSNVLLKNLTACTIADFG 343  
DB 307 TWNELCHVAETMSRGLSYLHEDVPWCRGEGHKPSIAHROPKSNVLLKSLDTAVLADSL 366  
  
QY 344 ALKPEAGSAGDTHQGVTRRYMADEVLEGAINFORDAFLRIDYAKMLVILWELASRTA 403  
DB 367 AVRFEPGPPGTHQGVTRRYMADEVLEGAINFORDAFLRIDYAKMLVILWELASRTA 426  
  
QY 404 ADGPVDEYMLPPEBEIGOHPSLEDNQEVVHKKPVLVRYWQKHAQMILCETIEECWD 463  
DB 427 ADGPVDEYMLPPEBEIGOHPSLEDNQEVVHKKPVLVRYWQKHAQMILCETIEECWD 486  
  
QY 464 HDAEARLGAAGCGERITQKQRLTNITIEDIVVTMTNVDPPPKSSSL 513  
DB 487 HDAEARLGAAGCGERITQKQRLTNITIEDIVVTMTNVDPPPKSSSL 536

RESULT 12  
US-08-459-009-12  
Sequence 12, Application US/08459009  
Patent No. 5861479  
GENERAL INFORMATION:  
APPLICANT: JIN, DONALD F  
APPLICANT: OPPERMANN, HERMANN  
APPLICANT: KUBERASAMPATH, THANGAVEL  
APPLICANT: SMART, JOHN E  
TITLE OF INVENTION: NOVEL MORPHOGEN CELL SURFACE RECEPTOR  
NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,  
ADDRESSEE: INC  
STREET: 45 SOUTH STREET  
CITY: HOPKINTON  
STATE: MA  
COUNTRY: USA  
ZIP: 01748  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/459,009  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/357,533  
FILING DATE: 16-DEC-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: KELLY, ROBIN D  
REGISTRATION NUMBER: 34,637  
REFERENCE/DOCKET NUMBER: CRP-073FW  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (508)-435-9001  
TELEFAX: (508)-435-0992  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 536 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
FEATURE:  
NAME/KEY: Protein  
LOCATION: 1..536  
OTHER INFORMATION: /note= "HUMAN ACTIVIN TYPE II  
OTHER INFORMATION: RECEPTOR"  
US-08-459-009-12

Query Match 69.7%; Score 1931; DB 2; Length 536;  
Best Local Similarity 64.7%; Pred. No. 1.3e-181;  
Matches 343; Conservative 86; Mismatches 77; Indels 24; Gaps 2;  
  
QY 8 AFAPVLISCSGAILGRSETQECLEFFNANWEKDRNTQGTVPYCGDKKRRHCHFCATWNI 67  
DB 7 ALALLWGLCAGSGRGEATRECIYNNANWELERTNQSLERCEGEQDKRLHCYASWANS 66  
  
QY 68 SGSTIEIVKQGWLDINDCYDRDTCVEKXDSSEVYFCCCEGNCNKEKPSYFPEMEVQTPTS 127  
DB 67 SGSTIEIVKQGWLDINDCYDRDTCVEKXDSSEVYFCCCEGNCNKEKPSYFPEMEVQTPTS 126  
  
QY 128 NPVTPEKPYNNILLYSLVPLMLIAGIVICAFNVRHHRMAYPPVLV 173  
DB 127 EPPPTAPTLTLLVAYSLPIGGLSLVLLAFNWRHRRPPYGHVDIHEVRQCORWAGRRD 186  
  
QY 174 -----PTQDPGPPPPPLGLKPLQLLELVKARGSPGVKQAQLNVEYVAKIPPIQ 224  
DB 187 GCADSFKPLFPDPPGPPPLGLKPLQLLELVKARGSPGVKQAQLNVEYVAKIPPIQ 246

QY 225 DKOSWQNEVEVYSLPGMKHENTLOFTGAERKGTSDVDLWLITAFHEKGSLSDFLKANYV 284  
Db 247 DKOSWQSEREIFSTPGKHENLLOFTAAEKRGNSLEVLWLITAFHDKGSLZDYLKGNII 306  
QY 285 SNWOLCHIAETMARGLAYLHEDIPGLK-DGKHPAISHRDIKSKNVLKNNLTACIADPGL 343  
Db 307 TWNELCHVAETMSRGLSYLHEDVPWCRGEGHKSIAHRDFKSKNVLKSDLTAVLADPGL 366  
QY 344 ALKPEAGKSGDTHGQVGTTRYMAPEVLEGAINFORDAFLRIDMYAMGLVWELASRCTA 403  
Db 367 AVRFEPKPGDTHGQVGTTRYMAPEVLEGAINFORDAFLRIDMYAMGLVWELASRCTA 426  
QY 404 ADGPVDEYMLPFEZEIGQHSLEDMQEVVHKKRPVLSDYWKHAGMAMLCETIEECWD 463  
Db 427 ADGPVDEYMLPFEZEIGQHSLEDMQEVVHKKRPVLSDYWKHAGMAMLCETIEECWD 486  
QY 464 HDAEARLSAGCVGERITQORLTNIITTEDIVTVVTMTNVDPPKSSSL 513  
Db 487 HDAEARLSAGCVGERITQORLTNIITTEDIVTVVTMTNVDPPKSSSL 536

## RESULT 13

US-08-459-951-12  
Sequence 12, Application US/08459951  
Patent No. 6093547  
GENERAL INFORMATION:  
APPLICANT: JIN, DONALD F  
APPLICANT: OPPERMAN, HERMANN  
APPLICANT: KUBERASAMPATH, THANGAVEL  
APPLICANT: SMART, JOHN E  
TITLE OF INVENTION: NOVEL MORPHOGEN CELL SURFACE RECEPTOR  
NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,  
ADDRESSEE: INC  
STREET: 45 SOUTH STREET  
CITY: HOPKINTON  
STATE: MA  
COUNTRY: USA  
ZIP: 01748  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/459,951  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/357,533  
FILING DATE: 16-DEC-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: KELLY, ROBIN D  
REGISTRATION NUMBER: 34,637  
REFERENCE/DOCKET NUMBER: CRP-073FW  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (508)-435-9001  
TELEFAX: (508)-435-0992  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 536 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
FEATURE:  
NAME/KEY: Protein  
LOCATION: 1-536  
OTHER INFORMATION: /note= "HUMAN ACTIVIN TYPE II  
RECEPTOR"

US-08-459-951-12

Query Match 69.7%; Score 1931; DB 3; Length 536;  
Best Local Similarity 64.7%; Pred. No. 1.3e-181;  
Matches 343; Conservative 86; Mismatches 77; Indels 24; Gaps 2;  
QY 8 AFAPVLISCSGAILGRSETQRCLEFFNANWEKDRNTQGTVEPCYGDKKRRCCFATWKNII 67  
Db 7 ALALLWGLSICAGSGEARETCIYNNANWELERTNOSGLERCEGEQDKRLHCYASWANS 66  
QY 66 SSGSIIVKQGCWLDINCIDRTDCVEKDDSPVYFCCCEGNMNCNEKFSYFPEMEVTOPTS 127  
Db 67 SGTIELVKKGCWLDNFCYDROECVATEENPOVYFCCCEGNFCNEERFTHLPPGPGPEVTY 126  
QY 128 NVETPKPPYNNILLYSLVPLMLIAGIVICAPVYVYHKKMAYPVVLV----- 173  
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QY 174 -----PTODPGPPPPSPILGLKPIQLLEVKARGPGCVKKAQLNNEYVAVKIPPIQ 224  
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QY 225 DKOSWQNEVEVYSLPGMKHENTLOFTGASKRTSDVDLWLITAFHEKGSLSDFLKANYV 284  
Db 247 DKOSWQSEREIFSTPGKHENLLOFTAAEKRGNSLEVLWLITAFHDKGSLZDYLKGNII 306  
QY 285 SNWOLCHIAETMARGLAYLHEDIPGLK-DGKHPAISHRDIKSKNVLKNNLTACIADPGL 343  
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QY 464 HDAEARLSAGCVGERITQORLTNIITTEDIVTVVTMTNVDPPKSSSL 513  
Db 487 HDAEARLSAGCVGERITQORLTNIITTEDIVTVVTMTNVDPPKSSSL 536

## RESULT 14

US-08-357-533A-11  
Sequence 11, Application US/08357533A  
Patent No. 5831050  
GENERAL INFORMATION:  
APPLICANT: JIN, DONALD F  
APPLICANT: OPPERMAN, HERMANN  
APPLICANT: KUBERASAMPATH, THANGAVEL  
APPLICANT: SMART, JOHN E  
TITLE OF INVENTION: NOVEL MORPHOGEN CELL SURFACE RECEPTOR  
NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,  
ADDRESSEE: INC  
STREET: 45 SOUTH STREET  
CITY: HOPKINTON  
STATE: MA  
COUNTRY: USA  
ZIP: 01748  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/357,533A  
FILING DATE: 16-DEC-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: KELLY, ROBIN D  
REGISTRATION NUMBER: 34,637  
REFERENCE/DOCKET NUMBER: CRP-073FW

## TELECOMMUNICATION INFORMATION:

TELEPHONE: (508)-435-9001  
TELEFAX: (508)-435-0992  
INFORMATION FOR SEQ ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 513 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
FEATURE:  
NAME/KEY: Protein  
LOCATION: 1..513  
OTHER INFORMATION: /note= "RAT ACTIVIN TYPE II  
RECEPTOR"  
US-08-357-533A-11

Query Match 69.2%; Score 1915.5; DB 2; Length 513;  
Best Local Similarity 67.1%; Pred. No. 4e-180;  
Matches 341; Conservative 85; Mismatches 79; Indels 3; Gaps 3;

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QY 68 SSGSIEIVKQGWLDINDCYDRDTCVCEKSDPEVYFCCCEGNMCKEKFSPFPEMVTQPTS 127  
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QY 248 QFIGAERKGTSS-VVDVLMILITAPHEKGSLSDFELKANVSVNOLCHIAETMARGLAYLHED 306  
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QY 486 TNIITTEDIVVVTWVNDVPPKESL 513  
DB 486 VNGSTSDCLVSLVTSSTNVLLPKESI 513

## RESULT 15

US-08-459-009-11  
Sequence 11, Application US/08459009  
Patent No. 5861479  
GENERAL INFORMATION:  
APPLICANT: JIN, DONALD F  
APPLICANT: OPPERMAN, HERMANN  
APPLICANT: KUBERAMPATH, THIANGAVEL  
APPLICANT: SMART, JOHN E  
TITLE OF INVENTION: NOVEL MORPHOGEN CELL SURFACE RECEPTOR  
NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,  
ADDRESS: INC  
STREET: 45 SOUTH STREET

CITY: HOPKINTON  
STATE: MA  
COUNTRY: USA  
ZIP: 01748  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/459,009  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/357,533  
FILING DATE: 16-DEC-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: KELLY, ROBIN D  
REGISTRATION NUMBER: 34,637  
REFERENCE/DOCKET NUMBER: CRP-073FW  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (508)-435-9001  
TELEFAX: (508)-435-0992  
INFORMATION FOR SEQ ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 513 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
FEATURE:  
NAME/KEY: Protein  
LOCATION: 1..513  
OTHER INFORMATION: /note= "RAT ACTIVIN TYPE II  
RECEPTOR"  
US-08-459-009-11

Query Match 69.2%; Score 1915.5; DB 2; Length 513;  
Best Local Similarity 67.1%; Pred. No. 4e-180;  
Matches 341; Conservative 85; Mismatches 79; Indels 3; Gaps 3;

QY 8 AFAPVLISCSGAILGRSETQCLFPNANWEKDRTNQTVGVCYGDKKRCHCFATWKNI 67  
DB 7 ALALLWGSUCAGSGEATRECIYNNANWELRTNQSGLRCGEQDKGLHCYASWNS 66  
QY 68 SSGSIEIVKQGWLDINDCYDRDTCVCEKSDPEVYFCCCEGNMCKEKFSPFPEMVTQPTS 127  
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DB 127 EPPPTAPTLLTVLAYSLLPIGGLSLVLLAFVWYRHHKMAYPVLPVTPQDPPPPSPLL 185  
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Job time : 24 secs

GenCore version 5.1.6  
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Run on: June 26, 2004, 13:27:15 ; Search time 188 seconds  
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Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0  
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Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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2	2556.4	99.7	2563	US-08-738-168B-12	Sequence 12, Appl
3	2556.4	99.7	2563	US-08-476-123-1	Sequence 1, Appl
4	2057.4	80.3	2122	US-08-738-168B-4	Sequence 4, Appl
5	1495.4	58.3	1563	US-08-738-168B-11	Sequence 11, Appl
6	983.4	38.4	2313	US-08-738-168B-14	Sequence 14, Appl
7	678.2	26.5	2335	US-08-300-584-3	Sequence 3, Appl
8	678.2	26.5	2335	US-08-476-123-3	Sequence 3, Appl
9	316.8	12.4	2625	US-08-357-533A-1	Sequence 1, Appl
10	316.8	12.4	2625	US-08-459-009-1	Sequence 1, Appl
11	316.8	12.4	2625	US-08-459-951-1	Sequence 8, Appl
12	294	11.5	294	US-08-738-168B-8	Sequence 8, Appl
13	168.2	6.6	2090	US-08-445-520B-8	Sequence 7, Appl
14	168.2	6.6	2090	US-08-451-946B-7	Sequence 7, Appl
15	168.2	6.6	2090	US-08-446-938B-7	Sequence 7, Appl
16	168.2	6.6	2090	US-08-311-703A-7	Sequence 7, Appl
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22	168.2	6.6	2090	US-09-023-655-1325	Sequence 1325, Ap
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24	168.2	6.6	2090	PCT-US92-09326-3	Sequence 3, Appl
25	168.2	6.6	2095	US-08-361-873A-1	Sequence 1, Appl
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27	165.4	6.5	3839	US-09-898-361-10	Sequence 10, Appl

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29 160.8 6.3 1952 3 US-09-382-256-17 Sequence 17, Appl  
30 160.8 6.3 1952 3 US-09-395-115-17 Sequence 17, Appl  
31 160.8 6.3 1952 4 US-08-436-265-17 Sequence 17, Appl  
32 160.8 6.3 1952 4 US-09-679-187-17 Sequence 7, Appl  
33 160.8 6.3 1952 4 US-08-448-371A-7 Sequence 7, Appl  
34 160.8 6.3 1952 5 PCT-US95-05467-7 Sequence 1, Appl  
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44 160.8 6.3 1952 5 PCT-US95-05467-7 Sequence 1, Appl  
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ALIGNMENTS

RESULT 1  
US-08-300-584-1  
; Sequence 1, Application US/08300584  
; Patent No. 5885794  
; GENERAL INFORMATION:  
; APPLICANT: Mathews, Lawrence S.  
; APPLICANT: Vele, Wylie W.  
; TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF  
; TITLE OF INVENTION: RECEPTOR(S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: pretty, Schroeder, Brueggemann & Clark  
; STREET: 444 South Flower Street, Suite 2000  
; CITY: Los Angeles  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 90071

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION NUMBER: US/08/300,584  
FILING DATE: 02-SEP-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION NUMBER: US 07/880,220  
FILING DATE: 08-MAY-1992  
PRIOR APPLICATION NUMBER: US 07/773,229  
FILING DATE: 09-OCT-1991  
PRIOR APPLICATION NUMBER: US 07/698,709  
FILING DATE: 10-MAY-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Reiter, Stephen E.  
REGISTRATION NUMBER: 31,192  
REFERENCE/DOCKET NUMBER: P41 9806  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-546-9392  
TELEFAX: 619-546-9392  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2563 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:

NAME/KEY: CDS  
LOCATION: 71..1609  
US-08-300-584-1

Query Match 99.7%; Score 2556.4; DB 2; Length 2563;  
Best Local Similarity 99.8%; Pred. No. 0;  
Matches 2557; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

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DB ACTGCTATTTTTTAAATGAAAACTTTTCATTTCAAGATTTAAAAAGGTTAACTTTTT 2040
QY 2041 ATTGCAATTTGCTGTGTTCTTATAAATGCACTATTGTAATGCCAATCACAACAGCTCTG 2100
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Db 721 TGTCAAAATATTTCCAAATACAGGCAAAACAGTCTCTGGCAGATGAATATGAAGTCTATAG 780  
Qy 781 TCTACCTGGAAATGAGCATGAGACATACACTACAGTTCATTGGTGCAGAGAAAAGAGGCAC 840  
Db 781 TCTACCTGGAAATGAGCATGAGACATACACTACAGTTCATTGGTGCAGAGAAAAGAGGCAC 840  
Qy 841 CAGTGTGGATGTGACCTGTGGCTTAATCAGAGCAATTCATGAAAGGGCTCAGTGTGAGA 900  
Db 841 CAGTGTGGATGTGACCTGTGGCTTAATCAGAGCAATTCATGAAAGGGCTCAGTGTGAGA 900  
Qy 901 CTTTCTTAAGCTTAAGTGTGCTCTTGGAAATCAGCTTTGTCATATTCAGAGAAACCATGGC 960  
Db 901 CTTTCTTAAGCTTAAGTGTGCTCTTGGAAATCAGCTTTGTCATATTCAGAGAAACCATGGC 960  
Qy 961 TAGAGGATTTGGCATATTTACATGAGGATATACCTGGCTTAAAGTTCGAGGCTGGCAGGCTTGC 1020  
Db 961 TAGAGGATTTGGCATATTTACATGAGGATATACCTGGCTTAAAGTTCGAGGCTGGCAGGCTTGC 1020  
Qy 1021 AATCTCTCAGAGGACATCAAAAGTAAAGATGAGTGTGCTTTGAAACCAATCTGACAGCTTG 1080  
Db 1021 AATCTCTCAGAGGACATCAAAAGTAAAGATGAGTGTGCTTTGAAACCAATCTGACAGCTTG 1080  
Qy 1081 CATTGCTGACTTTGGGTTGGGCTTAAAGTTCGAGGCTGGCAGGCTTGCAGGCTGACACCCA 1140  
Db 1081 CATTGCTGACTTTGGGTTGGGCTTAAAGTTCGAGGCTGGCAGGCTTGCAGGCTGACACCCA 1140  
Qy 1141 TGGGAGGTTGGTATCCCGAGGTATATGGCTCCAGAGGTTGGAGGCTGCTATAAAGCTT 1200  
Db 1141 TGGGAGGTTGGTATCCCGAGGTATATGGCTCCAGAGGTTGGAGGCTGCTATAAAGCTT 1200  
Qy 1201 CCAAAGGAGGCAATTTCTGAGATAGATATGATGACCCATGGGATTTAGTCTTATGGGAAT 1260  
Db 1201 CCAAAGGAGGCAATTTCTGAGATAGATATGATGACCCATGGGATTTAGTCTTATGGGAAT 1260  
Qy 1261 GCGTTCCTGGTGCATGCTGCGAGATGAGCCGCTAGATACAGTACATGTTACCAATTTGAGGA 1320  
Db 1261 GCGTTCCTGGTGCATGCTGCGAGATGAGCCGCTAGATACAGTACATGTTACCAATTTGAGGA 1320  
Qy 1321 AGAAATGCGCCAGCATCCATCTCTTGAAGATATGAGGAAGTGTGTTGTCATATAAAAAA 1380  
Db 1321 AGAAATGCGCCAGCATCCATCTCTTGAAGATATGAGGAAGTGTGTTGTCATATAAAAAA 1380  
Qy 1381 GAGGCTGCTTTTAAAGATATTTGGCAGAAACATGCGAGAAATGGCAATGCTCTGTGAAAC 1440  
Db 1381 GAGGCTGCTTTTAAAGATATTTGGCAGAAACATGCGAGAAATGGCAATGCTCTGTGAAAC 1440  
Qy 1441 GATAGAGAAATGTTGGGATCATGATGCGAGGAGGCTTATCAGCTGGATGTAGGTGA 1500  
Db 1441 GATAGAGAAATGTTGGGATCATGATGCGAGGAGGCTTATCAGCTGGATGTAGGTGA 1500  
Qy 1501 AAGAAATTAATCAGATGCAAGGCTAAACAAATATCAATTAACAGAGGACATTTGTAACAGT 1560  
Db 1501 AAGAAATTAATCAGATGCAAGGCTAAACAAATATCAATTAACAGAGGACATTTGTAACAGT 1560  
Qy 1561 GGTCAAAATGTTGCAAAATGTTGACTTCTCCCAAGGATCTAGTCTATGATGTGGCA 1620  
Db 1561 GGTCAAAATGTTGCAAAATGTTGACTTCTCCCAAGGATCTAGTCTATGATGTGGCA 1620  
Qy 1621 CCGTCTGTACACACTGAGGACTGGGACTCTGAATGAGGCTGCTAAGCTTAAGCAAGTGC 1680  
Db 1621 CCGTCTGTACACACTGAGGACTGGGACTCTGAATGAGGCTGCTAAGCTTAAGCAAGTGC 1680  
Qy 1681 TTAGTTGATTTTCTGTGTAATGATGAGATGCGCTCCAGGACATGTACGCAAGGAGGCC 1740  
Db 1681 TTAGTTGATTTTCTGTGTAATGATGAGATGCGCTCCAGGACATGTACGCAAGGAGGCC 1740  
Qy 1741 CTTGTGGAAGCATGATCTGGGAGATGATCTGGGAAACTTACTGATCGTCTGCAGCA 1800  
Db 1741 CTTGTGGAAGCATGATCTGGGAGATGATCTGGGAAACTTACTGATCGTCTGCAGCA 1800  
Qy 1801 CAGATATGAGAGGAGTCTTAAGGAAAAAGTGTCAAACTGTGTAAAGAACTTCTGAAATGTA 1860

Db 1801 CAGATATGAGAGGAGTCTTAAGGAAAAAGCTGCAAACTGTAAAGAACTTCTGAAAAATGTA 1860  
Qy 1861 CTTGGAAGATGTGGCCCTCTCCAAATCAAGGATCTTTTGGACCTGCTATCAAGTATTT 1920  
Db 1861 CTTGGAAGATGTGGCCCTCTCCAAATCAAGGATCTTTTGGACCTGCTATCAAGTATTT 1920  
Qy 1921 GCAAACTGACATCAGATTTCTTAATGCTGTGTCAGAGACACTAATTCCTTAAATGAAC 1980  
Db 1921 GCAAACTGACATCAGATTTCTTAATGCTGTGTCAGAGACACTAATTCCTTAAATGAAC 1980  
Qy 1981 ACTGCTATTTTAAATGAAAAAATTTTTCATTCGATTTTAAAGGGTAACTTTT 2040  
Db 1981 ACTGCTATTTTAAATGAAAAAATTTTTCATTCGATTTTAAAGGGTAACTTTT 2040  
Qy 2041 ATTGCAATTCCTGTGTTCTATATAATGACTATTTGTAATGCCAACATGACACAGCTTGTG 2100  
Db 2041 ATTGCAATTCCTGTGTTCTATATAATGACTATTTGTAATGCCAACATGACACAGCTTGTG 2100  
Qy 2101 AATGTGTAGTGTCTGCTGTCTGTGTGTCATATGATCATCAAAGTGGGTACAGTAAAGAGG 2160  
Db 2101 AATGTGTAGTGTCTGCTGTCTGTGTGTCATATGATCATCAAAGTGGGTACAGTAAAGAGG 2160  
Qy 2161 CTTTCCAGCATTTACTTTAACTCCCTCAACAAGGTATACCTCAGTCCACGGTGTGTTAAA 2220  
Db 2161 CTTTCCAGCATTTACTTTAACTCCCTCAACAAGGTATACCTCAGTCCACGGTGTGTTAAA 2220  
Qy 2221 TTATAAAATTCAAAAACAATAACAGATTTGAATAAATCACTGTCATGTTTATTAACAAGGT 2280  
Db 2221 TTATAAAATTCAAAAACAATAACAGATTTGAATAAATCACTGTCATGTTTATTAACAAGGT 2280  
Qy 2281 TAATTAACAATTCATGCTGTGTTTAAAGAAATGCTTAAGTAAATGCTTAAGTAAATGCTTAAG 2340  
Db 2281 TAATTAACAATTCATGCTGTGTTTAAAGAAATGCTTAAGTAAATGCTTAAGTAAATGCTTAAG 2340  
Qy 2341 TAAGTGTCTATTTGTAAGCAGTGTGTTTAAAGAAATGCTTAAGTAAATGCTTAAGTAAATGCTTAAG 2400  
Db 2341 TAAGTGTCTATTTGTAAGCAGTGTGTTTAAAGAAATGCTTAAGTAAATGCTTAAGTAAATGCTTAAG 2400  
Qy 2401 AAACAAGTGTCTCTTTGAAATGGAAGAAATGATGTTGTCACCTACCCCTACTACTTAT 2460  
Db 2401 AAACAAGTGTCTCTTTGAAATGGAAGAAATGATGTTGTCACCTACCCCTACTACTTAT 2460  
Qy 2461 ATCAAGGTCCTCAAAATATCTTTTCCATTTCAAAAGACAGCACTTTGAAACCCCTAAATTA 2520  
Db 2461 ATCAAGGTCCTCAAAATATCTTTTCCATTTCAAAAGACAGCACTTTGAAACCCCTAAATTA 2520  
Qy 2521 CAAGCCAGTGAAGAAAAAGCTTAAACACGCTTTTAAATAGGCC 2563  
Db 2521 CAAGCCAGTGAAGAAAAAGCTTAAACACGCTTTTAAATAGGCC 2563

## RESULT 3

US-08-476-123-1  
; Sequence 1, Application US/08476123  
; Patent No. 6162896  
; GENERAL INFORMATION:  
; APPLICANT: Mathews, Lawrence S.  
; APPLICANT: Vale, Wylie W.  
; APPLICANT: Tsuchida, Kunihiko  
; TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF  
; TITLE OF INVENTION: RECEPTOR (S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY  
; NUMBER OF SEQUENCES: 14  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: Pretty, Schroeder, Brueggemann & Clark  
; STREET: 444 South Flower Street, Suite 2000  
; CITY: Los Angeles  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 90071  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS



SOFTWARE: PatentIn Release #1.0, Version #1.25

**SOFTWARE:** Patent in Relative to Current Application Data.

CURRENT APPLICATION DATA: US/08/476.123

APPLICATION NUMBER: US/00  
FILING DATE: 07-JUN-1995

FILED DATE: 07-JUN-  
CLASSIFICATION: 435

CLASSIFICATION: 433  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/485,061

FILING DATE: 07-JUN-1995

APPLICATION NUMBER: US 08/300,584

FILING DATE: 02-SEP-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/880,220

FILING DATE: 08-MAY-

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/773,229

FILING DATE: 09-OCT-1991

PRIOR APPLICATION DATA: 75 07/000 700

APPLICATION NUMBER: US 07/698,709  
FILING DATE: 20 MAY 1991

FILING DATE: 10-MAY-  
ATTORNEY / AGENT INFORMANT

NAME: Reiter Stephen E

NAME: REITER, STEPHEN E.  
REGISTRATION NUMBER: 31

REGISTRATION NUMBER: 31,  
REFERENCE/DOCKET NUMBER:

TELECOMMUNICATION INFORMATION:

TELEPHONE: 619-546-4737

TELEFAX: 619-546-9392

INFORMATION FOR SEQ ID NO: 1

SEQUENCE CHARACTERISTICS:

LENGTH: 2563 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: Linear

MOLECULE TYPE: CDNA

FEATURE: NAME / REV: CDS

NAME/KEY: CDS  
LOCATION: 21

LOCATION: 11.  
1-476-123-1

T-62T-31F-1

erv Match

Query Match	99.7%	Score 2556.4	DB 3	Length 2563				
Best Local Similarity	99.8%	Pred. No. 0						
Matches 2557	Conservative	2	Mismatches	4	Indels	0	Gaps	0
QY	1	CTCCGAGGAAGACCCAGGAACTCGATATCTAGCGAGAACTTCCTACGGCTCTCTCCGGCG	60					
Db	1	CTCCGAGGAAGACCCAGGAACTCGATATCTAGCGAGAACTTCCTACGGCTCTCTCCGGCG	60					
QY	61	CTCTCGGAAATGGAGCTGCTCAGAGTGTGGGCTTCGCCGTCTCTCTATCTCTTGCTC	120					
Db	61	CTCTCGGAAATGGAGCTGCTCAGAGTGTGGGCTTCGCCGTCTCTCTATCTCTTGCTC	120					
QY	121	TTCCAGTGCTATACTTGGCAGATCAGAAACTCAGGAGTGCTTTTCTTTAAATGCTAAATG	180					
Db	121	TTCCAGTGCTATACTTGGCAGATCAGAAACTCAGGAGTGCTTTTCTTTAAATGCTAAATG	180					
QY	181	GGAAAARGCAGACCAACACAGACTGCTGTGTGAACCTTGCTATGGTGTGAAGATAAAGC	240					
Db	181	GGAAAARGCAGACCAACACAGACTGCTGTGTGAACCTTGCTATGGTGTGAAGATAAAGC	240					
QY	241	GGCAATGTTTTTGCTACTCGAAGATATTTCTCGTTCCATTGAAATAGTCAAGCAAGC	300					
Db	241	GGCAATGTTTTTGCTACTCGAAGATATTTCTCGTTCCATTGAAATAGTCAAGCAAGC	300					
QY	301	TTGTTGGCTGGATGATATCAACTGCTATGACAGACTGATTTGTGTGAAAAAAGACAGC	360					
Db	301	TTGTTGGCTGGATGATATCAACTGCTATGACAGACTGATTTGTGTGAAAAAAGACAGC	360					
QY	361	CCCTCAGAGTGACTTTTCTGCTGTGAGGGCAATATGTGTAATGAAAAAGTTCTCTTATTT	420					
Db	361	CCCTCAGAGTGACTTTTCTGCTGTGAGGGCAATATGTGTAATGAAAAAGTTCTCTTATTT	420					
QY	421	TCGGAGATGGAAGTGCACACAGCCCACTTCAATPCTTGTTTACACCGAAGCCACCTTATTA	480					
Db	421	TCGGAGATGGAAGTGCACACAGCCCACTTCAATPCTTGTTTACACCGAAGCCACCTTATTA	480					



Db 301 CTGAGGCTACTTTGTTGCTGTCAGGGCAATATGTTATGAAAGATTTCTTTATTTTC 360  
Qy 423 CGGAGATGGAGTACACAGCCCACTTCAAACTCCTGTTACACCGAAGCCACCTATTACA 482  
Db 361 CGGAGATGGAGTACACAGCCCACTTCAAACTCCTGTTACACCGAAGCCACCTATTACA 420  
Qy 483 ACATTCTGCTGTATTTCTTGGTACCACTAAATGTTAAATGTCAGGAATGTCATTGTCAT 542  
Db 421 ACATTCTGCTGTATTTCTTGGTACCACTAAATGTTAAATGTCAGGAATGTCATTGTCAT 480  
Qy 543 TTTGGGTACAGACATCAAGATGGCTTACCTCTGTCATCTGTTCTTACTCA- - - 598  
Db 481 TTTGGGTACAGACATCAAGATGGCTTACCTCTGTCATCTGTTCTTACTCAACACG 540  
Qy 599 - - - - - GACCCAGGACCAACCCAGGACCAACCCACCTTCCCATTTACTAGGGTTGA 638  
Db 541 CCTTTCAATAATGATAGAGGCCAGGACCAACCCACCTTCCCATTTACTAGGGTTGA 600  
Qy 639 AGCAATTCAGCTGTTAGAGTGAAGCAAGGAGGAGATTTGGTTGTCCTGGAAGCC 698  
Db 601 AGCAATTCAGCTGTTAGAGTGAAGCAAGGAGGAGATTTGGTTGTCCTGGAAGCC 660  
Qy 699 AGTTGCTCAATGAATGTCGCTGTCAAAATATTTCCAAATACAGGACAAACAGTCTGGC 758  
Db 661 AGTTGCTCAATGAATGTCGCTGTCAAAATATTTCCAAATACAGGACAAACAGTCTGGC 720  
Qy 759 AGAATGAATGAAGTCTATAGTCTACCTCGAATGAAGCATGAGACATATCTACAGTTCA 818  
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Qy 819 TTGGTCAGAGAAAGAGGACCAAGTGTGATGTGACCTGGCTTAATCAGAGCATTTTC 878  
Db 781 TTGGTCAGAGAAAGAGGACCAAGTGTGATGTGACCTGGCTTAATCAGAGCATTTTC 840  
Qy 879 ATGAAAGGCTCACTCTGACAGTTTCTTAAGGCTAAATGTCGCTCTTGGAATCABCTTT 938  
Db 841 ATGAAAGGCTCACTCTGACAGTTTCTTAAGGCTAAATGTCGCTCTTGGAATGAACTTT 900  
Qy 939 GTCATATTCAGAGAAACCTAGAGATGGCATTTTACATGAGGATATACCTGGCT 998  
Db 901 GTCATATTCAGAGAAACCTAGAGATGGCATTTTACATGAGGATATACCTGGCT 960  
Qy 999 TAAAGATGCCCAAGCCTGCATCTCTCAGGAGCATCAAAAGTAAAAATGTCGCT 1058  
Db 961 TAAAGATGCCCAAGCCTGCATCTCTCAGGAGCATCAAAAGTAAAAATGTCGCT 1020  
Qy 1059 TGAATAAATCTGACAGTGTGATGCTGATCTTTGGGTTGGCTTAAAGTTCAGGCTG 1118  
Db 1021 TGAATAAATCTGACAGTGTGATGCTGATCTTTGGGTTGGCTTAAAGTTCAGGCTG 1080  
Qy 1119 GCAAGTCTGAGGTGACACCCATGGGAGGTTGTTACCCGAGGTATATGCTCCAGAGG 1178  
Db 1081 GCAAGTCTGAGGTGACACCCATGGGAGGTTGTTACCCGAGGTATATGCTCCAGAGG 1140  
Qy 1179 TGTGAGGCTGCTATAAATCTCAAAAGGAGCAGATTTCTGAGGATAGATATGACGCCA 1238  
Db 1141 TGTGAGGCTGCTATAAATCTCAAAAGGAGCAGATTTCTGAGGATAGATATGACGCCA 1200  
Qy 1239 TGGGATTTAGTCTGAGGATTTGGCTTCTGTTGACCTGTCAGATGACCGGTAGATG 1298  
Db 1201 TGGGATTTAGTCTGAGGATTTGGCTTCTGTTGACCTGTCAGATGACCGGTAGATG 1260  
Qy 1299 AGTACATGTTACCATTTGAGGAGAAATGGCCAGCATCCATCTTTGAAGATATGACG 1358  
Db 1261 AGTACATGTTACCATTTGAGGAGAAATGGCCAGCATCCATCTTTGAAGATATGACG 1320  
Qy 1359 AGTCTGTTGACATAAAGAGGCTGTTTTRAGAGATTTATGGCAGAAATGACG 1418  
Db 1321 AGTCTGTTGACATAAAGAGGCTGTTTTRAGAGATTTATGGCAGAAATGACG 1380  
Qy 1419 GAATGGCAATGCTCTGTGAACCATAGAGAAATGTTGGGATCATGATGACAGAGCCAGG 1478

Db 1381 GAATGGCAATGCTCTGTGAAACGATAGAGAAATGTTGGGATCATGATGACAGAGCCAGT 1440  
Qy 1479 TATCAGCTGGATGCTGTAGGTGAAAGAAATTAATCTCAGATGCAAGAGACTAAACAAATATCATTA 1538  
Db 1441 TATCAGCTGGATGCTGTAGGTGAAAGAAATTAATCTCAGATGCAAGAGACTAAACAAATATCATTA 1500  
Qy 1539 CTACAGAGACATTTGTATACAGTGGTCAATGGTGCACAAATGTTGACTTTCTTCCCAAG 1598  
Db 1501 CTACAGAGACATTTGTATACAGTGGTCAATGGTGCACAAATGTTGACTTTCTTCCCAAG 1560  
Qy 1599 AATCTAGTCTATGATGGTGGCACCGCTCTGTACACACTGAGGACTGGGACTCTCTGAACTGGA 1658  
Db 1561 AATCTAGTCTATGATGGTGGCACCGCTCTGTACACACTGAGGACTGGGACTCTCTGAACTGGA 1620  
Qy 1659 GCTGCTAAGCTAAGGAAAGTGTAGTTTCTGTGTGAAATGAGTAGAGATGCTCTC 1718  
Db 1621 GCTGCTAAGCTAAGGAAAGTGTAGTTTCTGTGTGAAATGAGTAGAGATGCTCTC 1680  
Qy 1719 AGGACATGTACCAAGCAGCCCTTGTGGAAGCATGGAATCTGGGAGATGGGAA 1778  
Db 1681 AGGACATGTACCAAGCAGCCCTTGTGGAAGCATGGAATCTGGGAGATGGGAA 1740  
Qy 1779 ACTTACTGCTGCTGTCAGCAGCATATGAAAGAGAGTCTTAAGGGAAGCTGCAAACT 1838  
Db 1741 ACTTACTGCTGCTGTCAGCAGCATATGAAAGAGAGTCTTAAGGGAAGCTGCAAACT 1800  
Qy 1839 GTAAGAACTTCTGAAATGTACTGGAAGATGTGCGCCCTCTCCAAATCAAGGATCTTTT 1898  
Db 1801 GTAAGAACTTCTGAAATGTACTGGAAGATGTGCGCCCTCTCCAAATCAAGGATCTTTT 1860  
Qy 1899 GGACCTGGCTAAATCAAGTATTTGCAAAACTGACATCAGATTTCTTAATGCTGTGCAAG 1958  
Db 1861 GGACCTGGCTAAATCAAGTATTTGCAAAACTGACATCAGATTTCTTAATGCTGTGCAAG 1920  
Qy 1959 AGCTAAATTCCTTAAATGAACTACTGCTATTTTAAATGAAACCTTTTCATTTCAG 2018  
Db 1921 ACCTAAATTCCTTAAATGAACTACTGCTATTTTAAATGAAACCTTTTCATTTCAG 1980  
Qy 2019 ATTTTAAAGAGGTAACCTTTTATTTGTCATTTGCTGTTGTTCTATAAATGACTATTTGTA 2078  
Db 1981 ATTTTAAAGAGGTAACCTTTTATTTGTCATTTGCTGTTGTTCTATAAATGACTATTTGTA 2040  
Qy 2079 TGCCAAATGACACAGCTTGTGAATGTGTAGTGTGCTGCTGTTCTGTGTACATGCTATC 2138  
Db 2041 TGCCAAATGACACAGCTTGTGAATGTGTAGTGTGCTGCTGTTCTGTGTACATGCTATC 2100  
Qy 2139 AAGTGGGCTACAGTAAGAGG 2160  
Db 2101 AAGTGGGCTACAGTAAGAGG 2122

## RESULT 5

US-08-738-168B-11  
; Sequence 11, Application US/08738168B  
; Patent No. 6132988  
; GENERAL INFORMATION:  
; APPLICANT: Sugino, Hiromu  
; APPLICANT: Nakamura, Takanori  
; APPLICANT: Shouji, Hiroyuki  
; TITLE OF INVENTION: NEURONAL CELL-SPECIFIC RECEPTOR PROTEIN  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP  
; STREET: 130 Water Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: USA  
; ZIP: 02109  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30





Db 1639 ATCAATCAATGCAAAATCCACACATATATACCCAGGACATGTAACATGCTGA 1698  
QY 1565 ACATGCTGCAAAATGAGCTTCTCCAAAGATCTAGTCTATGATGGGACCGT 1624  
Db 1699 AGATGCTGCAAAATGAGCTTCTCCAAAGATCTAGTCTATGATGGGACCGT 1754  
QY 1625 CTGTACACACTGAGGACTGGGACTCTGAACTGGAGCTGTAACTAAGGAAAGTGTAG 1684  
Db 1755 -----GTCATACCGGACTCTGGTCCAGAGCTGTAGCTAAGGGGAACTTCTGC 1804  
QY 1685 TTGATTTCTGTGTAATGAGTAGGATGCTCCAGGACATGTACCAAGAGCCCTTGC 1744  
Db 1805 CTAACAGCAGATACGGCAAGTCCAGTGAATCGAGGTGGTGTCTTTTCAGATGCT 1864  
QY 1745 TGGAAAGCATGGATCTGGGAGATGGATCTGGGAATCTTCTGATCTGTGAGCAGAC 1804  
Db 1865 CCGTTTGGAGCAGCCCTCTTCCACTCGGAGCTTTTCATTCGATGCAATGCC 1924  
QY 1805 TATGAAGAGAGCTTAAGGAAAGCTGCAAACTGTAAAGAACTTCTGAAATGTA 1864  
Db 1925 AAAGGACTTGTGACTTGCCTGCTTTTATTGGACACAAAGGAATGAA 1975  
QY 1865 AAGATGTGCGCTCTCCAAATCAAGATCTTTTGGACCTGGCTAATCAAGTATTG 1924  
Db 1976 -----GAAACATGAAGAAACACAAACCTCTCTTAATAAGTACA 2018  
QY 1925 AACTGACATCAGATTTCTTAATGCTGTGAGAGACACTAATTCCTTAATGA 1982  
Db 2019 CCGTTTTTTTTTTTAAACAGCTCAGAAAGACTTATATACAGTGTACTGCTAC 2078  
QY 1983 TGTATTTTTTTTAAATGAATACTTTTCATTCAGATTTTAAAGGGTAACTTTTAT 2042  
Db 2079 TTTTTTTTTTTTTTAAATCAAGCAATTTCAATTCAGA-TTTAAAGGGTAACTGTTTTAT 2137  
QY 2043 TGCATTTGCTGT--TGTTCATTAATGACTATTGTAATGCCAAGTACACAGCTGTG 2100  
Db 2138 TGCATTTGCTGTGCTTCTCTCAATGACTATTGTAAGTATCATATGACAGCTGTG 2197  
QY 2101 AATGTAAGTGTGCTGCTTCTCTGTAACATAGTC-----ATCAAGTGGGTACAG 2152  
Db 2198 AATGTTCCGTGCTGCTTCTGCTGTATATATAAAGCTAAGGATCAACGTGGATATAT 2257  
QY 2153 TAAAGAGGCTTCAAGCAATTTTAACTTAACTCCCTCAACAA 2192  
Db 2258 TAAAGAGGCTTCAAGCAGACTTTAACTCCCTCAAAAAA 2297

## RESULT 7

US-08-300-584-3  
Sequence 3, Application US/08300584  
Patent No. 5885794  
GENERAL INFORMATION:  
APPLICANT: Mathews, Lawrence S.  
APPLICANT: Vale, Wylie W.  
TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF  
RECEPTOR(S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY  
NUMBER OF SEQUENCES: 10  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pretty, Schroeder, Brueggemann & Clark  
STREET: 444 South Flower Street, Suite 2000  
CITY: Los Angeles  
STATE: CA  
COUNTRY: USA  
ZIP: 90071  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/300,584  
FILING DATE: 02-SEP-1994

CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/880,220  
FILING DATE: 08-MAY-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/773,223  
FILING DATE: 09-OCT-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/698,709  
FILING DATE: 10-MAY-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Reiter, Stephen E.  
REGISTRATION NUMBER: 31,192  
REFERENCE/DOCKET NUMBER: P41 9806  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-546-9392  
TELEFAX: 619-546-9392  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2335 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
IMMEDIATE SOURCE:  
CLONE: XACTR  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 468..1997  
US-08-300-584-3

Query Match 26.5%; Score 678.2; DB 2; Length 2335;  
Best Local Similarity 65.6%; Pred. No. 2.9e-177;  
Matches 1037; Conservative 2; Mismatches 526; Indels 15; Gaps 3;

QY 62 CTCGGAAATGGGAGCTGCTGCAAAAGTTGGCGTTCGCGCTCTTCTTATCTTCTGCTCT 121  
Db 459 CCCAGGACATGGGGGCTCTGTAGCGCTGACTTCTTCTTCTTCTTCTTCTTCTTCT 518  
QY 122 TCAGTGTCTATCTTGGCAGATCAGAAACTCAGAGTGTCTTCTTCTTCTTCTTCTTCTTCT 181  
Db 519 GCAGCTCAGGACAGATGAAAGTGGAGAGAGTGCATCTATTACATGCCCACTGG 578  
QY 182 GAAAGACAGACAAACCAACCTGCTTCAACTCTGCTATGTTGATAAAGATAAAGCG 241  
Db 579 GAATGGAGAGACCAACCAAGTGGGGTGGAAAGCTCGAAGGGGAAAGAGCAGACGA 638  
QY 242 CGACATGTTTGTCTACCTGCAAGAAATATTTCTGTTCCATTTGAAATAGTGAAGCAAGGT 301  
Db 639 CTCACCTGTACGGCTCTTGGAGGAAACAAATTCGGGCTTCATAGAGCTGTTGAAAAAGCA 698  
QY 302 TGTGGCTGGATGATATCACTGTATGACAGGACTGATTTCTGTNGAAAAAAGAGACAGC 361  
Db 699 TGTGGCTGGATGATCACTGTATGACAGAGGATGATTTGCCAGGAGAGAAAC 758  
QY 362 CTTGAAGTGTACTTTTGTGCTGTGAGGCAATATGTTGTAATGAAAGTCTCTTATTTT 421  
Db 759 CCCAAGTCTTTTCTGCTGTGCGAGGAAACTACTGCAACAAGAAATTTACTCAATTTG 818  
QY 422 CCGGAGATGGAAGTACACAGCCCACTTCAATCTGTTCACCGAGCCCACTTATAC 481  
Db 819 CTTGAAGTGGAAACATTTGATTCGGAAGCCCA-----GCCGTGAGCTCCGTACTG 869  
QY 482 AACATTTCTGTGTATCTCTTGGTACCACTAATGTTAATGAGGAATTTGCTATTTGCA 541  
Db 870 AACATTTCTGTATCTCTCTCTTCCAAATGTTGCTCTTTCCATGGAATTTCTCTGCG 929  
QY 542 TTTTGGGTGTACAGACATCAAGATGGCCCTACCTCTGTACTTGTCTTCTTCTTCTTCT 601  
Db 930 TTTGATGTACCGTCTATCGAAAGCCCTCCCTACCGGCAATGTA---GAGATCAATGAGAC 986  
QY 602 CCAGGACCAACCCCACTTCCCATTTACTAGGTTTGAAGCCCATTTGCAAGTCTGTAGAGTG 661



Db 987 CCGGCTCTGCCCTCCATCTCTCTGTGGGCTGAAGCGCTGCAGTCTGCTGAGATA 1046  
Qy 562 AAAGCAAGGGAAGATTGGTTGGTCTGCTGAAAGCCAGTTGCTCATGATATGGCT 721  
Db 1047 AAGCGGAGGCGCTTTGGTTGGTCTGGAAGCTGCTGCTGAATGATATGGCA 1106  
Qy 722 GTCAAAATATTTCCAAATACAGCAAAACAGTCTGCGAGATGAATGAGTCTATAGT 781  
Db 1107 GTGAATATTTCCCGTGCAGTAAGCAGTCTGGCAGTGTGAGAAGAGATCTTCACC 1166  
Qy 782 CTACTGGAATGAAGCATGAGAAACATCTACAGTTCAATGTTGTCAGAGAAAGAGCACC 841  
Db 1167 ACGCGGCGCATGAACATGAACATCTATGAGTTCAATGCGCTGAAGAGGGGAGC 1226  
Qy 842 AGTGTGATGGACCTGTGCTTAATCACACATTTCTATGAAGGGCTCACTGTGAGAC 901  
Db 1227 AACCTGGAGATGAGCTGTGCTCATCTGTCATTTCTATGATAGGGTCTCTGACGGAC 1286  
Qy 902 TTTCTTAAGGTAAATGTTGCTCTTGGATCATCTTTGTCATATGTCAGAAACCATGGCT 961  
Db 1287 TACCTGAAGGGAATTTGGTGAAGTGAATGAATGCTGTCAATAACAGAAACATGGCT 1346  
Qy 962 AGAGGATGGCATATTTACATGAGATATACCTGCTTAAATGCTGAGGCTCAAGGCT 1018  
Db 1347 CGTGGCTGGCTTACTTACATGAGATGTGCGCTGAAGTGAAGGCAACAACT 1406  
Qy 1019 GCAATCTCTCAGGAGCATCAAAAGTAATAATGCTGTGTAATAAACAATCTGACAGCT 1078  
Db 1407 GCAATGCTCAGAGATTTTAAAGTAAGATGATGCTTAAGTAAGGCAACAACT 1466  
Qy 1079 TGCATTTCTGATTTGGTTGGCTTAAAGTTCGAGCTGCAAGTCTGAGGTGACACC 1138  
Db 1467 ATATTAGCAGATCTGGGCTGGCGTAGATTTGAGCTGTAAGAACTCCGGGAGATACA 1526  
Qy 1139 CATGGCAGGTTGGTACCGGAGGTATATGCTCCAGAGGTGTTGGAGGGTGTATAAAC 1198  
Db 1527 CAAGGAGGTTGGCAGCAGAGATATATGCTCTGAGGTTCTAGAGGAGCAATTAC 1586  
Qy 1199 TTCAAAGGAGCGATTCTGAGATAGATATGATCCGATGGGATAGTCTTATGGAA 1258  
Db 1587 TTTCAAGGAGATCTCTTCTCAGATAGATATGATGCTGAGGACTGGTACTCTGGAA 1646  
Qy 1259 TTGCTCTCTGCTGCTGCTGAGATGAGCGGCTGAGATGATGATGATGATGATGATGAT 1318  
Db 1647 ATAGTATCCGATGTACAGCAGCAGATGGGCGAGTATGATGATGATGATGATGATGAT 1706  
Qy 1319 GAAGAAATGGCCAGATCCATCTTTGAAGATGAGGAGGTTGTTGTCATATAAAA 1378  
Db 1707 GAAGAGATTTGGCAACATCTCTCCCTAGAGATCTGCAAGAAATGTTGCTCACAAG 1766  
Qy 1379 AAGAGGCTGTTTAAAGAGATTTATGCGAAGAAATGCGAATGGCAATGCTCTGTGA 1438  
Db 1767 ATAGCTCTGATTTCAAGACCATGCTGCTGAACACCTGCTGCGCCCACTGTGCTC 1826  
Qy 1439 ACGTAGAAGATGTTGGATCATGATGAGAGCCAGGTTATCAGCTGGATGTTAGGT 1498  
Db 1827 ACCATTGAAGATGCTGGACCATGATGCGAAGCAGGCTTTCCGAGGCTGCTAGAG 1886  
Qy 1499 GAAAGATTTACTCAGATGCAAGACTACAAATATCATTAATCAGAGGACATTTTACA 1558  
Db 1887 GAGGATATTTCCAAATCCGTAATCAGTGAACGCGCACTACCTCGGACTGCTTGTATCC 1946  
Qy 1559 GTGCTCAATGTTGACAAATGTTGACTTTCTCCCAAGAAATCTAGTCTATGATGTTGG 1618  
Db 1947 ATTGTTACATCTGTCCCAATGTTGACTTTGCGGCGCAAGAGTCCAGTATCTGAGTTTC 2006  
Qy 1619 CACGCTGTACACACTGAG 1638  
Db 2007 TTTGGTCTTTCCAGACTCAG 2026

RESULT 8

US-08-476-123-3

; Sequence 3, Application US/08476123  
; Patent No. 6162896  
; GENERAL INFORMATION:  
; APPLICANT: Mathews, Lawrence S.  
; APPLICANT: Vale, Wylie W.  
; APPLICANT: Tsuchida, Kunihiro  
; TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF  
; RECEPTOR(S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY  
; NUMBER OF SEQUENCES: 14  
; CORRESPONDENCE ADDRESS:  
; ADDRESSES: Pretty, Schroeder, Brueggemann & Clark  
; STREET: 444 South Flower Street, Suite 2000  
; CITY: Los Angeles  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 90071  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/476,123  
; FILING DATE: 07-JUN-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/485,061  
; FILING DATE: 07-JUN-1995  
; APPLICATION NUMBER: US 08/300,584  
; FILING DATE: 02-SEP-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/880,220  
; FILING DATE: 08-MAY-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/773,229  
; FILING DATE: 09-OCT-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/698,709  
; FILING DATE: 10-MAY-1991  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Reiter, Stephen E.  
; REGISTRATION NUMBER: 31,192  
; REFERENCE/DOCKET NUMBER: P41 9927  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 619-546-4737  
; TELEFAX: 619-546-9392  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 2335 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; IMMEDIATE SOURCE:  
; CLONE: XACTR  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 468..1997  
; US-08-476-123-3

Query Match 26.5%; Score 678.2; DB 3; Length 2335;  
Best Local Similarity 65.6%; Pred. No. 2.9e-177;  
Matches 1037; Conservative 2; Mismatches 526; Indels 15; Gaps 3;

Qy 62 CTCGGGAAATGGAGCTGCTGCAAGTTGGCGTTCGCCGCTTTCTTATCTCTTGTCT 121  
Db 459 CCAGAGAGCATGGGGCGTCTGTAGCGCTGACTTTCTTACTTCTTCTTCACTTCCGC 518  
Qy 122 TCAGGTGCTATCTTGGCAGATCAGAAATCAGAGAGTGTCTTTCTTTAATGTAATGG 181  
Db 519 GCAGGCTCAGGACACCATGAAGTGAAGAGAGAGAGTGCATCTATTACATGCAACTGG 578  
Qy 182 GAAARGCAGAGAACCAACCACTGGTGTGTAACCTTGTCTATGATGAATAAAGCG 241

Db 579 GAACCTGGAGAGGACCAACCAAGTGGGTGGAAAGCTGCGAGGGGGAAGAGCAAGCGA 638  
QY 242 CGACATGTTTGTCTACCTGGAAGATAATTTCTGGTTCCATCGAAATAGTGAAGCAAGGT 301  
Db 639 CTCACATGTTAGCGCGCTTTGGAGGAACAATTCGGGCTTCATAGAGCTGGTGAAGAGGA 698  
QY 302 TGTGGCTGGATGATATCAACTCTATGACAGGACTGATTTGTTGAAAGAAAGAGCAGC 361  
Db 699 TGTGGCTGGATGATATCAACTCTATGACAGGACTGATTTGTTGAAAGAAAGAGCAGC 758  
QY 362 CTTGAAGTGTACTTTTGTCTGTGAGGGAATATGTTGTAAGTGAAGTTCTCTATTTT 421  
Db 759 CCCCAGTCTTTTCTGTCTGTGAGGGAATCTGCAACAAGAAATTTACTCATTTG 818  
QY 422 CCGGAGATGAGATGACACAGCCCACTCAAAATCTGTTTACACCGAAGCCACCTATTAC 481  
Db 819 CTTGAGTTCGACATTTGATTCGAGAGCCCA-----GCCGTGACCTCCGACTG 869  
QY 482 AACATTTCTGTATTTCTGTGTGACCACTAATGTTAAATGTCAGGAATGTCATTTGTGCA 541  
Db 870 AACATTTCTGTATTTCTGTGTGACCACTAATGTTAAATGTCAGGAATGTCATTTGTGCA 541  
QY 542 TTTTGGTGTACAGATCAGAGATGCGCTACCTCCTGTACTTGTTCCTACTCAAGAC 601  
Db 930 TTTTGGTGTACAGATCAGAGATGCGCTACCTCCTGTACTTGTTCCTACTCAAGAC 601  
QY 602 CCAGGACACCCCACTTTCCCAATTTACTAGGTTTGAAGCCATTTGAGGCTGTTAGAAGTG 661  
Db 987 CCGGCTCTGCCCTCCATCTCTCTGTTGCGGCTGAAGCCGCTGCGAGTTGCTGGAGATA 1046  
QY 662 AAAGCAGGGGAGATTTGGTGTGTCGTGAAGCCAGTTCCTCAATGAATATGTCCT 721  
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QY 722 GTCAAAATATTTCCAAATACAGCAACAGTCTGCGCAAGTGAATGAATGATGATGAT 781  
Db 1107 GTCAAAATATTTCCAAATACAGCAACAGTCTGCGCAAGTGAATGAATGATGATGAT 781  
QY 782 CTACTGGAATGAAGATGAGAACTATCTAGTTCATTTGTTGTCAGAGAAAGAGCCACC 841  
Db 1167 AGCGCGGGCATGAACATGAACATGAGTTCATTTGAGTTTCAATTCGCGCTGAGAGGGGGAAGC 1226  
QY 842 AGTGTGGATGTGAGCTGTGGCTTAATCAAGATTTCAATGAAGGGCTCACTGTCAGAC 901  
Db 1227 AACCTGGAGATGAGCTGTGGCTTAATCAAGATTTCAATGAAGGGCTCACTGTCAGAC 1286  
QY 902 TTTCTTAAGGCTAATGTGTCTCTTGGAAATCACTTTTGTTCATTTGTCAGAAACCATGGCT 961  
Db 1287 TACCTCAAGGGCAACTTTGGTGAAGTGAATGAAGTGTGTCATCAATGAAGAAACATGGCT 1346  
QY 962 AGAGGATGGCATAATTTACATGAGGATATACCTGGCTTAAAGTGAAGGGCTCACTGTCAGAC 1018  
Db 1347 CGTGGCTGGCTACTTACATGAGATGTGCGGCTGTAAGGTTGAAGGGGCAACACCT 1406  
QY 1019 GCAATCTCTCAGAGGACATCAAAAGTAAAGTGAAGTGTGTTGAAAGAAACATCTGACAGCT 1078  
Db 1407 GCAATCTCTCAGAGGATTTAAAGTAAAGTGAAGTGTGTTGAAAGAAACATCTGACAGCT 1466  
QY 1079 TGCATTTGCACTTTGGTGGCTTAAAGTTCAGGCTGCAAGTGTGCAAGTGTGCAAGCT 1138  
Db 1467 ATATTAGCAGACTTTCGGGCTGGCGGTACGATTTGAGCTTGAAGAAACCTCCGGGAGATACA 1526  
QY 1139 CATGGGCAAGTTGGTACCGGAGGATATAGGCTCCAGAGGCTTGGAGGCTGCTATAAAC 1198  
Db 1527 CACGGCAGTTGGCAGCAGAGGATATAGGCTCCGAGGTTCTAGAGGAGCAATTAAC 1586  
QY 1199 TTCCAAAGGAGCGCATTTCTGAGGATAGATATGTAAGCCATGGGATTAATGTCCTATGGAA 1258  
Db 1587 TTTCAGCGAGATTTCTTTCTCAGGATAGATATGTAAGCCATGGGATTAATGTCCTATGGAA 1646  
QY 1259 TTGGCTTCTGTTGCTGCTGCTGAGATGAGCCGCTAGATGATGATGATGATGATGATGAT 1318

Db 1647 ATAGTATCCGATGTACAGCAGCAGATGGCCAGCTAGATGATGATGATGATGATGATGAT 1706  
QY 1319 GAAGAAATTTGGCGAGATCCATCTCTTTGAAATATGATGAGAGAGTTGTTGTCATAAAAA 1378  
Db 1707 GAAGAGATTTGGCGAACATCTCTTCCCTAGAGGATCTGCAAGAGAGTTGTCGTTTCAAGAG 1766  
QY 1379 AAGAGGCTGTTTAAAGAGATTTATTTGGCAGAAACATGACGAAATGGCAATGCTCTGTGAA 1438  
Db 1767 ATACGCTCTGTTTCAAGACCACTGCTGCTGAACACCTGCTGCTGCTGCTGCTGCTGCT 1826  
QY 1439 AGATAGAAGAAATTTGGGATCATGATGACAGAGCAGGTTATCAGCTGAGTGTGTAGGT 1498  
Db 1827 ACCATTTGAAGAAATGTTGGGACCATGATGCGGAAGCAGCGCTTTCCGCAAGGCTGCGTAGAG 1886  
QY 1499 GAAGAAATTTACTCAGATGCAAGACTAACAATATATCTTACTACAGAGGACATTTGTAACA 1558  
Db 1887 GAGCGTATTTCCCAATCCGTAATCAGTGAACGCACTACTCTCGACTGCTGTTGATCC 1946  
QY 1559 GTGGTCAAAATGGTGACAAATGTTGACTTTTCTCCCAAGAAATCTAGCTGATGATGGTGG 1618  
Db 1947 ATTGTTACATCTGTCAACCAATGTGACTTTGCGCGCCAAAGAGTCCAGTATCTGAGGTTTC 2006  
QY 1619 CACGCTCTGTACACACTGAG 1638  
Db 2007 TTTGCTTTCCAGACTCAG 2026

## RESULT 9

US-08-357-533A-1  
; Sequence 1, Application US/08357533A  
; Patent No. 5831050  
; GENERAL INFORMATION:  
; APPLICANT: JIN, DONALD P  
; APPLICANT: OPPERMAN, HERMANN  
; APPLICANT: KUBERASAMPATH, THANGAVEL  
; APPLICANT: SMART, JOHN E  
; TITLE OF INVENTION: NOVEL MORPHOGEN CELL SURFACE RECEPTOR  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,  
; ADDRESS: INC  
; STREET: 45 SOUTH STREET  
; CITY: HOPKINTON  
; STATE: MA  
; COUNTRY: USA  
; ZIP: 01748  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA: US/08/357,533A  
; FILING DATE: 16-DEC-1994  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: KELEY, ROBIN D  
; REGISTRATION NUMBER: 34,637  
; REFERENCE/DOCKET NUMBER: CEP-073FW  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (508)-435-9001  
; TELEFAX: (508)-435-0992  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 2625 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 379..1929  
; OTHER INFORMATION: /product= "DROSOPHILA MORPHOGEN"





Db 1166 AGAA-----GCACATGGCAAGCCGGAATATTGGCTGATATCCACCTACCAGCATAACG 1219  
Qy 888 GCTCACTGTGACAGCTTCTTAAGGCTAATGTGCTCTCTTGGATCACTTTGTCTATATG 947  
Db 1220 GATCACTATGCGACTACCTCAATCGCACACGATCTCATGGCCAGAGTGTGCCCGATCG 1279  
Qy 948 CAGAAACCATGGCTAGAGGATTGGCATATTTACATGAGGATATACCTGCTTAA--AG 1004  
Db 1280 CTGAGTCCATGGCAATGACTGGCACAATCTGCAGGAGAGATCCCGGCATCAAGACCG 1339  
Qy 1005 ATGGCCACAAGCTGCAATCTCTCAGGAGGACATCAAAAGTAAATGTGCTTGTGAAA 1064  
Db 1340 ATGGGCTAAACCATCATGATGCTCACCAGAGCTTCAAGTCTAAGAACGTACTGCTTAA 1399  
Qy 1065 ACAATCTGACAGCTTGCATGCTGACTTTGGGTTGGCTTAAAGTTTCGAGGCTGCAAGT 1124  
Db 1400 GGAATCTGAGCGCTGATAGCTGCTTGGTGTGGCCATGATATCCAGCCAGGCAAGC 1459  
Qy 1125 CTGCAAGTGACACCCATGGGAGGTTGGTACCGGAGGTATATGCTCCAGAGGTTGG 1184  
Db 1460 CTGCGCGGATACACACGGTCAAGTAGGCACTCGACGTTACATGGCCCGCCAGAGTGC 1519  
Qy 1185 AGGGTGTCTAAATCTTCAAGAGGAGCGATTTCTGAGGATAGATATGACGCCATGGAT 1244  
Db 1520 AGGGTGCCTCAATTTCAATAGAGCGCTTTCTTAGCCTAGAGCTTACGATCGCGCC 1579  
Qy 1245 TAGTCTATGGAAATGGCTTCTGCTTGGTCACTGCTGCAGANGACCCGCTAGATGATACA 1304  
Db 1580 TAGTCTCTCGGAATGGTGTACCGTG--TGACTTTGGCCGACCGCTGGGTGAGTTCC 1636  
Qy 1305 TGTTACCATTTTCAGGAGGAATTTGGCCAGCATCTCTTCAAGTATGAGGAGTTG 1364  
Db 1637 AGCTGCTTTTCAGGCGAGCTGGGCTGAGCGCTGGTGGACGAAGTTTCAGGAGAGTG 1696  
Qy 1365 TTGTGCATAAAAAAGAGCTGTTTTAAGAGATTTATGGCAGAAAATGTCAGGAGTGG 1424  
Db 1697 TGTAATGAAGAGCTGGCCCTCGTTTGTCTCAACTCTGGCGCGCCATCGGACCTTA 1756  
Qy 1425 CAATGCTCTGTAAGAGATGAGAAATGTTGGATCATGATTCAGAGCCAGGATTCAG 1484  
Db 1757 ATGTATTTGCGACACAATGGAGGAGTGCTGGGATCAAGACCTGAGGCTGCTTACT 1816  
Qy 1485 CTGGATGTGAGTGAAGAAATTTACTCAGATGCAAA 1520  
Db 1817 CTTCGTGTATGAAAGCTTTGGCCAGCTAAACA 1852

## RESULT 11

US-08-459-951-1  
; Sequence 1, Application US/08459951  
; Patent No. 6091547  
; GENERAL INFORMATION:  
; APPLICANT: JIN, DONALD F  
; APPLICANT: OPPERMANN, HERMANN  
; APPLICANT: KUBERASAMPATH, THANAVEL  
; APPLICANT: SMART, JOHN E  
; TITLE OF INVENTION: NOVEL MORPHOGEN CELL SURFACE RECEPTOR  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,  
; ADDRESSEE: INC  
; STREET: 45 SOUTH STREET  
; CITY: HOPKINTON  
; STATE: MA  
; COUNTRY: USA  
; ZIP: 01748  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/459,951

; PILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/357,533  
; FILING DATE: 16-DEC-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: KELLY, ROBIN D  
; REGISTRATION NUMBER: 34,637  
; REFERENCE/DOCKET NUMBER: CRP-073FW  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (508)-435-9001  
; TELEFAX: (508)-435-0992  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 2625 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 379..1929  
; OTHER INFORMATION: /product= "DROSOPHILA MORPHOGEN  
; OTHER INFORMATION: RECEPTOR"  
; US-08-459-951-1

Query Match 12.4%; Score 316.8; DB 3; Length 2625;  
Best Local Similarity 60.9%; Pred. No. 2.1e-77;  
Matches 570; Conservative 1; Mismatches 353; Indels 12; Gaps 3;  
Qy 588 TTCCTACTCAAGACCCAGGACCCACCTCCCTCCCATTTAGGGTTGAAGCCATTGC 647  
Db 926 TACCACGACGAGCGGTGAGATAACAACCTCATGCCATGCTCAGCAACCGTCCCATTC 985  
Qy 648 AGCTGTTAGAGTGAAGAGCAAGGGAGATTTGGTTGTCTGGAAAGCCAGTTGCTCA 707  
Db 986 AGCTGTGGAACAGAGGCCAGTGTAGATTGCGTGTGATGTGTGCAAGCCAAAGTCAACA 1045  
Qy 708 ATGAATATGTCCTCAATATATTTCAATACAGGACAAACAGTCTCTGGCAGATGAT 767  
Db 1046 ATCAGGATGTGGCGGTCAAGATCTTTCCGATGCAAGGAAAGAAATCTGGACCCAGGAGC 1105  
Qy 768 ATGAAGTCTATAGTCTACCTGGAATGAAGCATGAGAACATACACTACAGTTTCAATGGTCAG 827  
Db 1106 ACGATATCTACAAGCTGCGCGCATGCGCCATCCGACATCCTCGAATTCCTGGGCGTTG 1165  
Qy 828 AGAAAGAGGCCACCAAGTGTGGATGTGACCTGTGGCTTAATCAGACAGATTTTCATGAAAAGG 887  
Db 1166 AGAA-----GCACATGCAAGCCGGAATATTGGCTGATATCCACCTACCGACATAACG 1219  
Qy 888 GCTCACTGTGACAGCTTTCTTAAGGCTAATGTGGTCTCTTGAATCACTTTGTCTATATTG 947  
Db 1220 GATCACTATGCGACTACTCTCAATCGCACACGATCTCATGCCAGAGTTGTGCGCATCG 1279  
Qy 948 CAGAAACCATGGCTAGAGGATTGGCATATTTACATGAGGATATACCTGGCTTAA--AG 1004  
Db 1280 CTGAGTCCATGGCCAAATGGAGTGGCACAATCTGCACAGGAGATCCCGGCATCAAGACCG 1339  
Qy 1005 ATGGCCACAAGCTGCAATCTCTCAGGAGGACATCAAAAGTAAATGTGCTTGTGAAA 1064  
Db 1340 ATGGGCTAAACCATCATGATGCTCACCAGAGCTTCAAGTCTAAGAACGTACTGCTTAA 1399  
Qy 1065 ACAATCTGACAGCTTGCATGCTGACTTTGGGTTGGCTTAAAGTTTCAGAGCTGCGAAGT 1124  
Db 1400 GCGATCTGACGGCCTGTATAGTGTGCTTGGCTGATATATCCAGCCAGGCAAGC 1459  
Qy 1125 CTGCAAGTGACACCCATGGGAGGTTGGTACCGGAGGATATGCTCCAGAGGTTGG 1184  
Db 1460 CTGCGCGGATACACACGGTCAAGTAGGCTTCAAGTGGCCCGCCAGAGTGTGTTG 1519  
Qy 1185 AGGGTGTCTATAAACTTCCAAAGGAGCACTTTCTGAGGATAGATATGACGCCATGGAT 1244  
Db 1520 AGGGTGCAATCAATTTCAATAGAGAGCGCTTTCTTACGCATAGACGCTCTACGATGCGGCC 1579

QY 1245 TAGTCTATCGGAATGCGCTTCCTCGTTGCACTGCTGCAGATGACCGGTAGATGAGTACA 1304  
DB 1580 TAGTCTCTCGGAATGCTGCAAGGCTG---TGACTTTGCGGACCGCGTGGTCACTTC 1636  
QY 1305 TGTACCATTTGAGGAAGAAATGGCCAGCATCCATCTCTTGAAGATATGCGGAAGTTG 1364  
DB 1637 AGTGTCCCTTTGAGCCGAGCTGGCCCTGAGGCCGTGCTGCACTCTCGGCCACTTCA 1696  
QY 1365 TTGTGCATAAAAAAGAGAGCCCTGTTTAAAGAGATTATTGSCAGAAACATGACGAGGATGG 1424  
DB 1697 TGCTAATGAAGAAGCTGCGCCCTCGTTTGTCACTCTCGGCCGCGCCATCCGGGACTTA 1756  
QY 1425 CANTGCTCTGTAACATGAGAGATGTTTGGGATCATGATGATGACAGAGCCAGTTATCAG 1484  
DB 1757 ATGTATTCTCGGACACAAATGAGGAGTCTGGGATCAGCAGCTGAGGCTCGCTTACGT 1816  
QY 1485 CTGGATGTGTAGGTGAAGAAATTAATCTCAGATGCAAA 1520  
DB 1817 CTTGCTGTGTATGTAAGAACGCTTTGCGGCGACTAAACA 1852

RESULT 12  
US-08-738-168B-8  
; Sequence 8, Application US/08738168B  
; Patent No. 6132988  
; GENERAL INFORMATION:  
; APPLICANT: Sugino, Hiromu  
; APPLICANT: Nakamura, Takanori  
; APPLICANT: Shouji, Hiroki  
; TITLE OF INVENTION: NEURONAL CELL-SPECIFIC RECEPTOR PROTEIN  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP  
; STREET: 130 Water Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: USA  
; ZIP: 02109  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentln Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/738,168B  
; FILING DATE: 25-OCT-1996  
; PRIOR APPLICATION DATA: JP 280939/1995  
; APPLICATION NUMBER: JP 280939/1995  
; FILING DATE: 27-OCT-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: JP 174909/1996  
; FILING DATE: 04-JUL-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Reenick, David S.  
; REGISTRATION NUMBER: 34,235  
; REFERENCE/DOCKET NUMBER: 342/46901  
; TELEPHONE: 617-523-3400  
; TELEFAX: 617-523-6440  
; INFORMATION FOR SEQ ID NO: 8:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 294 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-738-168B-8

Query Match 11.5%; Score 294; DB 3; Length 294;  
Best Local Similarity 100.0%; Pred. No. 1.5e-71;  
Matches 294; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 572 TACCTCTCTGTACTTGTTCCTACTCAAGACCCAGGACCCACCCACCTTCCCCCACTACTA 631  
DB 1 TACCTCTCTGTACTTGTTCCTACTCAAGACCCAGGACCCACCCACCTTCCCCCACTACTA 60  
QY 632 GGGTTGAACCCATTGCGAGCTGTAGAGGTGAAGCAAGGGGAAGATTTCGTTGCTCTGG 691  
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QY 692 AAAGCCCACTTCTCAATGAATATGTGGCTGTCAAAATATTTCCAAATACAGGACAAACAG 751  
DB 121 AAAGCCCACTTCTCAATGAATATGTGGCTGTCAAAATATTTCCAAATACAGGACAAACAG 180  
QY 752 TCTTGGCAGAAATATGCAAGCTCTATAGTCTACCTGGAAATGAGCATGAGACATACTA 811  
DB 181 TCTTGGCAGAAATATGCAAGCTCTATAGTCTACCTGGAAATGAGCATGAGACATACTA 240  
QY 812 CAGTTTCATTGTCGACAGAAAAAGAGCACCAGTGTGGATGTGACCTGTGGGCTA 865  
DB 241 CAGTTTCATTGTCGACAGAAAAAGAGCACCAGTGTGGATGTGACCTGTGGGCTA 294

RESULT 13  
US-08-445-520B-8  
; Sequence 8, Application US/08445520B  
; Patent No. 5866323  
; GENERAL INFORMATION:  
; APPLICANT: Markowitz, Sanford D.  
; APPLICANT: Brattain, Michael G.  
; APPLICANT: Willson, James K.V.  
; TITLE OF INVENTION: CANCER DIAGNOSIS, PROGNOSIS AND  
; TITLE OF INVENTION: THERAPY BASED ON MUTATION OF RECEPTOR  
; NUMBER OF SEQUENCES: 9  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BAKER & BOTTS, L.L.P.  
; STREET: 1299 Pennsylvania Avenue, N.W.  
; CITY: Washington  
; STATE: DC  
; COUNTRY: USA  
; ZIP: 20004-2400  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/445,520B  
; FILING DATE: 22-MAY-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/417,867  
; FILING DATE: 07-APR-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Posorske, Laurence H.  
; REGISTRATION NUMBER: 34,698  
; REFERENCE/DOCKET NUMBER: 062361-0101  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 202-639-7700  
; TELEFAX: 202-639-7890  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 8:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 2090 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; FEATURE:  
; NAME/KEY: Coding Sequence  
; LOCATION: 336..2036  
; OTHER INFORMATION:  
US-08-445-520B-8

Query Match 6.6%; Score 168.2; DB 2; Length 2090;  
Best Local Similarity 53.8%; Pred. No. 2.1e-36;

Matches 441; Conservative 0; Mismatches 363; Indels 15; Gaps 4;

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DB 1148 TGAGACAGTGGCAGTCAAGATCTTTCCCTATGAGGAGTATGCTCTTGGAGACAGAGAA 1207  
QY 769 TGAAGTCTATAGTCTACCTGGAAATGAGCATGAGAACATACACTACAGTTCATGTCGAG 828  
DB 1208 GGACATCTTCTCAGACATCAATCTGAAGCATGAGAACATACACTCCAGTCTCTGACGGCTGA 1267  
QY 829 GAAAAGAGGACCAAGTGTGAGATGAGCTGCTGCTTAATCAGACATTTTCAATGAAAGG 888  
DB 1268 GGAGCGGAGAGCGAGTGGGGAACAATCTGCTGATCAGCGCTTCCAGCCCAAGG 1327  
QY 889 CTCAGTCTCAGACTTTCTTAAGGCTAATGAGTCTCTTGAATGATCTTGTGATATTC 948  
DB 1328 CAACCTACAGAGTACCTGACGGGAGTGTCTCATGCTGGGAGGAGCTGCGAAGCTGG 1387  
QY 949 AGAAACCATGGCTAGAGATTTGACATATTTACATGAGGATATACCTGGCTTAAAGATG 1008  
DB 1388 CAGCTCTCTCGCCGGGGAGTGTCTCACTCCACAGTATCACACT---CCATGTGGAG 1444  
QY 1009 CCAGAGCTGCAATCTCTCAGGGAATCAAGGAATCAAAAGTAAATGTGCTGTTGAAACAA 1068  
DB 1445 GCCCAAGATGCCCATCTGTCGACAGGACCTCAAGAGCTCCAAATATCTCTGTAAGAACGA 1504  
QY 1069 TCTGACAGCTTGCATCTGCTGACCTTTGGGTTGGCTTAAAGTTCGAGGCTGGCAAGTCTGC 1128  
DB 1505 CCTAACCTGCTGCTGTGACCTTTGGGCTTCCCTGGCTGAGACCTACTCTGTCTGT 1564  
QY 1129 AGGTGAC-----ACCCATGGGAGGTTGGTACCGGAGGATPATGGCTCCAGAGGTGT 1182  
DB 1565 GGATGACCTGGCTAACAGTGGGAGGTTGGGAACTGCAAGATACATGGCTCCAGAGTCTCT 1624  
QY 1183 GAGGCTGCTAATCACTTCAAA---GGAGGCAATTTCTGAGGATAGATATGACCCAT 1239  
DB 1625 AGAATCCAGATGATTTGAGAGATGCTGAGTCTTCAAGCAGACCGATGTCTACTCCAT 1684  
QY 1240 GGATTAGTCTCTATGGGAATTTGGCTTCTCTGCTGCACTGTGTCAGATGAGACCGCTAGATCA 1299  
DB 1685 GGCTCTGGTCTCTGGGAATGACATCTGCTG---TAATGAGTGGGAGAGTAAAGA 1741  
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QY 1360 AGTTGTTGTGCATAAAAAAGAGGCTGTGTTTAAAGAGATTTTGGCAGAAACATGCAG 1419  
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DB 1862 CATCCAGATGTTGTGAGACGTTGACTGAGTCTGGGACCAAGCCAGAGGCGCGTCT 1921  
QY 1480 ATCAGCTGGATGTAGGTGAAGATTTACTCAGATGCA 1518  
DB 1922 CACAGCCAGTGTGGCAGACGCTTCACTGAGCTGGA 1960

## RESULT 14

US-08-451-946B-7  
; Sequence 7, Application US/08451946B  
; Patent No. 6001969  
; GENERAL INFORMATION:  
; APPLICANT: Lil, Herbert Y.  
; APPLICANT: Wang, Xiao-Fan  
; APPLICANT: Weinberg, Robert A.  
; APPLICANT: Lodish, Harvey F.  
; TITLE OF INVENTION: TGF-Beta Type Receptor cDNAs Encoded  
; TITLE OF INVENTION: Products and Uses Therefor  
; NUMBER OF SEQUENCES: 8  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.

STREET: Two Militia Drive  
CITY: Lexington  
STATE: Massachusetts  
COUNTRY: U.S.A.  
ZIP: 02173  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/451,946B  
FILING DATE: 26-MAY-1996  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/311,703  
FILING DATE: 23-SEP-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/786,063  
FILING DATE: 31-OCT-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Granahan, Patricia  
REGISTRATION NUMBER: 32,227  
REFERENCE/DOCKET NUMBER: WHI91-09V  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617-861-6240  
TELEFAX: 617-861-9540  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2090 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 336..2038  
US-08-451-946B-7

Query Match 6.6%; Score 168.2; DB 3; Length 2090;

Best Local Similarity 53.8%; Pred. No. 2.1e-36;

Matches 441; Conservative 0; Mismatches 363; Indels 15; Gaps 4;

QY 709 TGAATATGTCCTGCTCAAAATATTTTCCAAATACAGGCAAAACAGTCTCTGGCAGAAATGAATA 768  
DB 1148 TGAGACAGTGGCAGTCAAGATCTTTCCCTATGAGGAGTATGCTCTTGGAGACAGAGAA 1207  
QY 769 TGAAGTCTATAGTCTACCTGGNAATGAGCATGAGAACATACACTACAGTTCATGTCGAG 828  
DB 1208 GGACATCTTCTCAGACATCAATCTGAAGCATGAGAACATACCTCAGTCTCTGACGGCTGA 1267  
QY 829 GAAAAGAGGACCAAGTGTGAGATGAGCTGCTGCTAATCAGACATTTTCAATGAAAGG 888  
DB 1268 GGAGCGGAGAGCGAGTGGGGAACAATCTGCTGATCAGCGCTTCCAGCCCAAGG 1327  
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Sequence 7, Application US/08446938B  
Patent No. 6008011  
GENERAL INFORMATION:  
APPLICANT: Lin, Herbert Y.  
APPLICANT: Wang, Xiao-Fan  
APPLICANT: Weinberg, Robert A.  
APPLICANT: Lodish, Harvey F.  
TITLE OF INVENTION: TGF-Beta Type Receptor cDNAs Encoded  
TITLE OF INVENTION: Products and Uses Thereof  
NUMBER OF SEQUENCES: 8  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
STREET: Two Militia Drive  
CITY: Lexington  
STATE: Massachusetts  
COUNTRY: U.S.A.  
ZIP: 02173  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/446,938B  
FILING DATE: 23-MAY-1995  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/311,703  
FILING DATE: 23-SEP-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/786,063  
FILING DATE: 31-OCT-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Granahan, Patricia  
REGISTRATION NUMBER: 32,227  
REFERENCE/DOCKET NUMBER: WH91-09FZ  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617-861-6240  
TELEFAX: 617-861-9540  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2090 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double

TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 336..2038  
US-08-446-938B-7  
Query Match  
Best Local Similarity 6.6%; Score 158.2; DB 3; Length 2090;  
Matches 441; Conservative 0; Mismatches 363; Indels 15; Gaps 4;  
Qy 709 TGAATATGTGGCTGTCACAAATATTTCCAAATACAGACAAACAGTCTCTGCGAAGTGAATA 768  
Db 1148 TGAGACAGTGGGAGTCAAGATCTTTCCCTATGAGGAGTATGCTCTTGAAGACAGAGAA 1207  
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Search completed: June 26, 2004, 14:44:36  
Job time : 200 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 26, 2004, 14:34:35 ; Search time 1075 Seconds  
(without alignments)  
10922.169 Million cell updates/sec

Title: US-09-742-684A-15

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Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 3017426 seqs, 2290544650 residues

Total number of hits satisfying chosen parameters: 6034852

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

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Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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1	2556.4	99.7	2563	9 US-09-742-684-1	Sequence 1, Appli
2	1978.2	77.2	5286	15 US-10-240-965-122	Sequence 122, App
3	1903	74.2	2382	15 US-10-101-510-140	Sequence 140, App
4	678.2	26.5	2335	9 US-09-742-684-3	Sequence 3, Appli
5	403.6	15.7	452	9 US-09-878-178-688	Sequence 688, App
6	403.6	15.7	452	14 US-10-046-935-688	Sequence 688, App
7	403.6	15.7	452	15 US-10-146-502-688	Sequence 688, App
8	316.8	12.4	2637	14 US-10-108-605-156	Sequence 156, App
9	316.8	12.4	2637	14 US-10-108-605-78	Sequence 78, Appli
10	238.2	9.3	535	10 US-09-918-995-30472	Sequence 30472, A
11	233	9.1	517	10 US-09-918-995-32124	Sequence 32124, A
12	225.6	8.8	504	10 US-09-918-995-24126	Sequence 24126, A
13	168.2	6.6	2090	9 US-09-878-905-10	Sequence 10, Appli
14	168.2	6.6	2090	13 US-10-646-640-10	Sequence 10, Appli

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6.6 2090 17 US-10-641-643-1325 Sequence 1325, Ap
6.6 2094 17 US-10-432-989-4 Sequence 4, Appli
6.6 3206 15 US-10-101-510-438 Sequence 438, App
6.6 3206 9 US-09-954-456-2001 Sequence 2001, App
6.6 5759 13 US-09-888-361-3 Sequence 3, Appli
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5.8 2032 15 US-10-139-814-13 Sequence 67, Appli
5.8 2032 16 US-10-295-027-67 Sequence 788, App
5.8 2032 16 US-10-295-027-836 Sequence 836, App
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#### ALIGNMENTS

#### RESULT 1

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US-09-742-684-1
; Sequence 1, Application US/09742684
; Patent No. US20010039036A1
; GENERAL INFORMATION:
; APPLICANT: Mathews, Lawrence S.
;           Vale, Wylie W.
;           Tsuchida, Kunihiko
; TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF
;                   RECEPTOR(S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Pretty, Schroeder, Brueggemann & Clark
;   STREET: 444 South Flower Street, Suite 2000
;   CITY: Los Angeles
;   STATE: CA
;   COUNTRY: USA
;   ZIP: 90071
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#### COMPUTER READABLE FORM:

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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/09/742,684
APPLICATION NUMBER: US 08/300,584
FILING DATE: 19-Dec-2000
CLASSIFICATION: <Unknown>
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#### PRIOR APPLICATION DATA:

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APPLICATION NUMBER: 08/476,123
FILING DATE: <Unknown>
APPLICATION NUMBER: US 08/300,584
FILING DATE: 02-SEP-1994
APPLICATION NUMBER: US 07/880,220
FILING DATE: 08-MAY-1992
APPLICATION NUMBER: US 07/773,229
FILING DATE: 09-OCT-1991
APPLICATION NUMBER: US 07/698,709
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FILING DATE: 10-MAY-1991

ATTORNEY/AGENT INFORMATION:

NAME: Reiter, Stephen E.

REGISTRATION NUMBER: 31,192

REFERENCE/DOCKET NUMBER: P41 9927

TELECOMMUNICATION INFORMATION:

TELEPHONE: 619-546-4737

TELEFAX: 619-546-9392

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 2563 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: cDNA

FEATURE:

NAME/KEY: CDS

LOCATION: 71..1609

SEQUENCE DESCRIPTION: SEQ ID NO: 1:

US-09-742-684-1

Query Match 99.7%; Score 2556.4; DB 9; Length 2563;  
 Best Local Similarity 99.8%; Pred. No. 0;  
 Matches 2557; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

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 QY 601 CCCAGGACACCCCACTTCCCAATTAATCTAGGGTTGAAGCCATTCGACGCTGTAGAGT 660  
 DB 601 CCCAGGACACCCCACTTCCCAATTAATCTAGGGTTGAAGCCATTCGACGCTGTAGAGT 660  
 QY 661 GAAAGCAAGGGAAGATTTGTTGCTGTGAAGCCCAAGTGTCTCAATGAATATGTGCG 720  
 DB 661 GAAAGCAAGGGAAGATTTGTTGCTGTGAAGCCCAAGTGTCTCAATGAATATGTGCG 720

QY 721 TGTCAAATATTTTCCAATACAGGACAAACAGTCTCTGCAGAAATGAATATCAAGTCTATAG 780  
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 QY 841 CAGTGTGGATGTGGACCTGTGGCTAATTCACAGCAATTCATGAAAGGGCTCACTGTGAGA 900  
 DB 841 CAGTGTGGATGTGGACCTGTGGCTAATTCACAGCAATTCATGAAAGGGCTCACTGTGAGA 900  
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 DB 1021 AATCTCTCAGAGGACATCAAAAGTAAATGTGCTGTGAAACCAATCTGACAGCTTG 1080  
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 DB 1141 TGGGAGGTTGGTACCCGGAGGATATATGGCTCCAGAGGTGTTGGAGGGTCTATAAATCT 1200  
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 DB 1321 AGAAATGGCCAGCATCCATCTCTTGAAGATATGACAGAAAGTTGTTGTCATATAAATAA 1380  
 QY 1381 GAGCCTGTTTTAAGAGATTAATGGCAGAAACATGACAGGAATGCGCAATGTCTGTGAAC 1440  
 DB 1381 GAGCCTGTTTTAAGAGATTAATGGCAGAAACATGACAGGAATGCGCAATGTCTGTGAAC 1440  
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 DB 1441 GATAGAGATGTTGGATCATGATCCAGAACCCAGTTATCAGCTGGATGTGTAGTGA 1500  
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 DB 1501 AAGAAATTAATCAGATGCAAAAGACTTAACAAATATCATTAATCTACAGAGACATTTGTAAC 1560  
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 DB 1621 CCGTCTGTACACACTGAGGACTGGGACTCTGAACTGGAGCTGCTAAGCTAAGGAAAGTGC 1680  
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 DB 1681 TTAGTTGATTTTCTGTGTAATGAGTAGGATGCTCCAGACATGTCACGACAGCAGCC 1740  
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 DB 1741 CTTGTGGAAGCATGATCTGGAGATGCAATCTGGGAAACTTACTGATCGTCTGACAGCA 1800  
 QY 1801 CAGATATGAAGAGGAGTCTTAAGGGAAAGAGCTGCAAACTGTAAAGAACTTCTGAAATGTA 1860



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1861 CTCGAGAATGTGGCCCTCTCCAAATCAAGGATCTTTGGACCTGGCTAATCAAGTATTT 1920  
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1921 GAAAACCTGACATCAGATTTCTTAATGTCTGTGTCAGAGACACTAATTCCTTAATGAAC 1980  
1921 GAAAACCTGACATCAGATTTCTTAATGTCTGTGTCAGAGACACTAATTCCTTAATGAAC 1980  
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1981 ACTGCTATTTTAAAGGAAACCTTTCTATTCAGATTTTAAAGGGAAGCTTTT 2040  
2041 ATTGCAATTTGCTGTTCTTCTATAAATGACTAATGTAATGCAACATGACACAGCTTGTG 2100  
2041 ATTGCAATTTGCTGTTCTTCTATAAATGACTAATGTAATGCAACATGACACAGCTTGTG 2100  
2101 AATGCTAGTGTGCTGCTGTTCTGCTATAGTATCAATGAGTGGGTACAGTAAGAGG 2160  
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2161 CTTCCAAAGCAATTAACCTCCCTCAACAGGTATACCTCAATGTCACAGTGGGTAAAGAG 2220  
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2221 TATAAATGTAAGAACACTAAGCAATTTGAATTAATCAAGTCCATGTTTATAAAGGT 2280  
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2281 TAATTAACAATTCACCTGCTGTTTAAAGGAAAGTAAAGTAAAGTAAAGTAAAGTAAAG 2340  
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2341 TAAGTGGCTATTGTTAAAGCAGTGTGTTAGCTTTCTTCTAGCTGCTGTAATTTAGGGA 2400  
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2401 AAACAGTCTGCTGTTGAATGGAAGAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAG 2460  
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2461 ATCAAGGTCCTGCTGTTTCTTTCATTTTCAAGACAGCACTTTGAAACCCCTAAATTA 2520  
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RESULT 2  
US-10-240-965-122  
; Sequence 122, Application US/10240965  
; Publication No. US20030165924A1  
; GENERAL INFORMATION:  
; APPLICANT: INCYTE GENOMICS, INC.  
; APPLICANT: SHIFMAN, Dov  
; APPLICANT: SOMOGYI, Roland  
; APPLICANT: LAMN, Richard M.  
; APPLICANT: SEILHAMER, Jeffrey J.  
; APPLICANT: PORTER, Gordon J.  
; APPLICANT: MIKITA, Thomas  
; APPLICANT: TAI, Julie  
; TITLE OF INVENTION: GENES EXPRESSED IN FOAM CELL DIFFERENTIATION  
; FILE REFERENCE: PA-0025 PCT  
; CURRENT APPLICATION NUMBER: US/10/240,965  
; CURRENT FILING DATE: 2002-10-04  
; PRIOR APPLICATION NUMBER: 60/195,106  
; PRIOR FILING DATE: 2000-04-05  
; NUMBER OF SEQ ID NOS: 276  
; SOFTWARE: PERL Program

SEQ ID NO 122  
LENGTH: 5286  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: misc\_feature  
OTHER INFORMATION: Incyte ID No. US20030165924A1 014704.3  
FEATURE:  
NAME/KEY: unsure  
LOCATION: 4789-4822  
OTHER INFORMATION: a, t, c, g, or other  
US-10-240-965-122  
  
Query Match 77.2%; Score 1978.2; DB 15; Length 5286;  
Best Local Similarity 91.0%; Pred. No. 0;  
Matches 2222; Conservative 2; Mismatches 181; Indels 37; Gaps 10;  
  
QY 1 CTCGAGGAGACACCCAGGGAACCTGATATCTAGGAGAACTTCTACGCTTCTCCGGCG 60  
DB 103 CTCGAGGAGACACCCAGGGAACCTGATATCTAGGAGAACTTCTCCGGANTCCCGCG 162  
QY 61 CTCGAGGAGAAATGGGAGCTGCTGCAAGTTCGCGTTCGCGTCTTTCTTATCTCTGTC 120  
DB 163 CTCGAGGAGAAATGGGAGCTGCTGCAAGTTCGCGTTCGCGTCTTTCTTATCTCTGTC 222  
QY 121 TTCAGTCTCTATCTTTCAGATCAGAACTCAGGAGTCTTTCTTCTTAACTAATG 180  
DB 223 TTCAGTCTCTATCTTTCAGATCAGAACTCAGGAGTCTTTCTTCTTAACTAATG 282  
QY 181 GGAAGAGACAGAAACCAACACGACCTGCTGCAAGTTCGCGTTCGCTATGCTGATAAAG 240  
DB 283 GGAAGAGACAGAAACCAACCAACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 342  
QY 241 GCGACATGTTTTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 299  
DB 343 GCGCAATGTTTTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 402  
QY 300 GTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 359  
DB 403 GTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 462  
QY 360 GCGCTGAGTGTCTTTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 419  
DB 463 GCGCTGAGTGTCTTTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 522  
QY 420 TTCGAGATGGAAGTCAACAGCCACTTCAAACTCTGCTGCTGCTGCTGCTGCTGCTGCT 479  
DB 523 TTCGAGATGGAAGTCAACAGCCACTTCAAACTCTGCTGCTGCTGCTGCTGCTGCTGCT 582  
QY 480 ACAACATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 539  
DB 583 ACAACATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 642  
QY 540 CATTTTGGGTGCTGAGACATCAGAGTGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 599  
DB 643 CATTTTGGGTGCTGAGAGTGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 702  
QY 600 ACCGAGACACCCCTTCCCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 659  
DB 703 ACCGAGACACCCCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 762  
QY 660 TGAAGCAAGGGAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 719  
DB 763 TGAAGCAAGGGAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 822  
QY 720 CTGTCAAAATATTTCCCAATACAGGACAAACAGTCTGCTGCTGCTGCTGCTGCTGCTGCT 779  
DB 823 CTGTCAAAATATTTCCCAATACAGGACAAACAGTCTGCTGCTGCTGCTGCTGCTGCTGCT 882  
QY 780 GTCTACCTGGAATGAAGCATGAGACATCTACAGTTCATTTGGTGCAGGAAAGAGCA 839  
DB 883 GTTTCCTGGAATGAAGCATGAGACATCTACAGTTCATTTGGTGCAGGAAAGAGCA 942



Qy	840	CCAGTGTGGAGTGGGAACCTGTGGCTAAATCAAGCATTTTCATGAAAAGGGCTCACTGTTCAG	899
Db	943	CCAGTGTGTGATGGGATCTTTGGCTGATCAAGCATTTTCATGAAAAGGGTTCACTATTCAG	1002
Qy	900	ACTTTCTTAAGGCTAAATGGGTCTCTTGGGAATCAACCTTTGTCATATTGACAGAACCATGG	959
Db	1003	ACTTTCTTAAGGCTAAATGGGTCTCTTTGGGAATGAACTGTGTCAATTTCAGAAAACCATGG	1062
Qy	960	CTAGAGGATTTGGCATATTTTACATGAGGATATACCTGGCTTTAAAAGATGGCCACAGCCCTG	1019
Db	1063	CTAGAGGATTTGGCATATTTTACATGAGGATATACCTGGCTTTAAAAGATGGCCACAAACCTG	1122
Qy	1020	CAATCTCTCACGGGACATCAAAAGTAAAATGTGTGTGTTGAAAACAACTGCACAGCTT	1079
Db	1123	CCATATCTCACAGGACATCAAAAGTAAAATGTGTGTGTTGAAAACAAACCTGCACAGCTT	1182
Qy	1080	GCATTGCTGACTTTTGGGTTCGCCCTTAAAGTTTCGAGGCTGGCAAGTCTGCAGGTGCACACCC	1139
Db	1183	GCATTGCTGACTTTTGGGTTCGCCCTTAAATTTTGAGGCTGGCAAGTCTGCAGGCGATACCC	1242
Qy	1140	ATGGGAGGTTGTGTACCGGAGGTATATGCTCCAGAGGTGTTTGGAGGTTGCTATAAACT	1199
Db	1243	ATGSCAGGTTGTGTACCCGGAGGTACATGCTCCAGAGGTATTAGAGGGTGTCTATAAACT	1302
Qy	1200	TCCAAAGGAGCGCATTTCTGAGGATAGATATGTACGCCATTCGGATTAGTCCATATGGGAAT	1259
Db	1303	TCCAAAGGAGTCATTTTGGAGGATAGATATGTATGCCATGGGATTAGTCTCTATGGGAAC	1362
Qy	1260	TGGCTTCTGTGTGCACCTGTCTCGAGATGGACCCGTAGATGATCATGTTTACCAATTTGAGG	1319
Db	1363	TGGCTTCTGTGTACTGTCTCGATGGACCTGTAGATGAAATCATGTTGCCAATTTGAGG	1422
Qy	1320	AAGAAATTGGCCAGCATCCATCTCTTCAAGATATGCAGGAGGTTGTGTGTCATAAAGAAA	1379
Db	1423	AGAAATTGGCCAGCATCCATCTCTTGAAGCATTCAGGAAATTTGTTGTGCATAAAGAAA	1482
Qy	1380	AGAGGCTGTGTTTAAAGAGATTATTGGCAGAAACAATGCAGAAATGGCAATGCTCTGTCAAA	1439
Db	1483	AGAGGCTGTGTTTAAAGAGATTATTGGGCAGAAACAATGCTGTGAAATGCTCTGTGAAA	1542
Qy	1440	CGATAGAGAAATGTTGGGATCATGATCCAGAGCCAGGTTATCAGCTGAGATGTAGGTG	1499
Db	1543	CCATTGAAGAAATGTTGGGATCAGACGACAGAGCCAGGTTATCAGCTGGAATGTGTAGGTG	1602
Qy	1500	AAAGAAATTAATCAGATGCAAAAGACTAAACAATATCATTAATACAGAGGACATTTGTAACAG	1559
Db	1603	AAAGAAATTAATCAGATGCAAGAGACTAAACAATATTAATACCAAGAGGACATTTGTAACAG	1662
Qy	1560	TGGTCACAATGGGTGAACAAATGTTGACCTTCTCCAAAAGAAATCTAGTCTATGATGTGTGC	1619
Db	1663	TGGTCACAATGGGTGAACAAATGTTGACCTTCTCTCCAAAAGAAATCTAGTCTATGATGTGTGC	1722
Qy	1620	ACGCTGTGTACACATCAGACATCGGACCTGTGAACCTGGAAGCTGTAAGCTTAAGGAAAGTG	1679
Db	1723	GCAATCTGTGCACACTAAGAAATGGGACTCTGAHCTGGAAGCTGCTAAGCTTAAGAAACTG	1782
Qy	1680	CTT--AGTTGATTTTCTGTGAAATGAGTAGGATGCTCCAGAGACATGTAACAGACAG	1737
Db	1783	CTTACAGTTTATTTCTGTCTGTAATAAGTAGGATGTCCTCTCGCAAAATGTTAAGAAAGAA	1842
Qy	1738	CCCTTGTGGAAGCATGGATCTGGGAGATGGATCTCTGGGAAATCTTATCTGATCGTCTGCA	1797
Db	1843	GACCCCTTGTGTGAAA-----ATGTTGCTCTGGGAGACTTACTGCTGATTCGCCGACA	1892
Qy	1798	GCACAGATATGAAG---AGGAGTCTTAAGGAAAAGCTGCAAAATCTGTA-----AAGAACTT	1849
Db	1893	GCACAGATGTAAGGACATGAGACTTAAGAGAAACCTTTGCCAAATCTCTATAAAGAAACTTTT	1952
Qy	1850	CTGAAAATGACTCGAAGATGTGGCCCTCTCCAAATCAAGGATCTTTTGGAGCTGGCTTA	1909
Db	1953	GAAGAAAGTGTACATGAAGAAATGTAGGCCCTCTCCAAATCAAGGATCTTTTGGAGCTGGCTTA	2012
Qy	1910	ATCAAGTATTTTGCAAAATCGACATCAAGTTTCTTAATGTCTGTGCAGAAAGACATTAATTC	1969

2013	Db	ATCGAGTGGTTG--AAACATGACATCAGATTTCTTAATGCTGTGCAAGA CACTAATTC	2071
1970	Qy	TTAAATGAACACTCTGCTATTTTTTTTTAAATGAAAACTTTTCATTTTCAGATTTTAAAAAG	2029
2072	Db	TTAAATGAACACTCTGCTATTTTTTTTTAAATCAAAACCTTTTCATTTTCAGATTTTAAAAAG	2131
2030	Qy	GGTAAAC---TTTTTTATTCGATTTGCTGTGTTCTATATAATGACTACTGTAAATGCCAAC	2086
2132	Db	GGTAACTGTTTTTATTCGATTTGCTGTGTTCTATATAATGACTATTTGATGCGCAT	2191
2087	Qy	TGACACAGCTTGGAATGTAGTGTGCTGCTGTTCTGTGTACAT--AGTCATCAAGATG	2144
2192	Db	TGACACAGCTTGGAATGTTTAGTGTGCTGCTGTTCTGTGTACATAAAGTCATCAAGATG	2251
2145	Qy	GGGTACAGTAAGAAGCGCTCCCAAGCATTACTTTAACTCCTCCCAACAGGTATACCTCAG	2204
2252	Db	GGGTACAGTAAGAAGCGCTCCCAAGCATTACTTTAACTCCTCCCAACAGGTATACCTCAG	2311
2205	Qy	TTCCACGGTGTGTAATTTATAAAATTTGAAACACTAACAGAAATTTGAAATCACTGCCA	2264
2312	Db	TTCCACGGTGTGTAATTTATAAAATTTGAAACACTAACCAAAATTTGAATA-----A	2362
2265	Qy	TGTTTTATACAACAGGTAAATTACAAATTCACCTGTGTTATTTAA-GAAAAAATGGTAAGCT	2323
2363	Db	TAATTCGATCCATGTTTGTAACAATTCACCTGTGTTATTTAAGGAAAAAAGGTAAAGCT	2422
2324	Qy	ATGCTTAGTGCCAAATAGTAGTGCGCTATTTGTGTAAGCAGGTTTTTACGCTTTCTCTACT	2383
2423	Db	ATGCTTAGTGCCAAATAGTAGTGCGCATTCGTAAGCAGGTTTTTACGATTTCTTTGTCCT	2482
2384	Qy	GGCTTGTAATTTAGGGAAAAACAAGTGTCTGTTTGAAATGGA	2425
2483	Db	GGCTTGTAATTTAGGGAAAAAAGTGTCTGTTTTTGAAAGA	2524

### RESULT 3

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US-10-101-510-140
? Sequence 140, Application US/10101510
? Publication No. US200030148295A1
? GENERAL INFORMATION:
? APPLICANT: WANG, JACKSON
? TITLE OF INVENTION: EXPRESSION PROFILES AND METHODS OF USE
? FILE REFERENCE: 15117.0012
? CURRENT APPLICATION NUMBER: US/10/101,510
? CURRENT FILING DATE: 2002-03-20
? PRIOR APPLICATION NUMBER: 60/276,947
? PRIOR FILING DATE: 2001-03-20
? NUMBER OF SEQ ID NOS: 805
? SOFTWARE: PatentIn Ver. 2.1
? SEQ ID NO 140
? LENGTH: 2382
? TYPE: DNA
? ORGANISM: Homo sapiens
? US-10-101-510-140

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Query Match 74.2%; Score 1903; DB 15; Length 2382;  
Best Local Similarity 92.0%; Pred. No. 0;  
Matches 2089: Conservative 2; Mismatches 153; Indels 26; Gaps 7;

Qy	1	CTCCGAGGAAGACCCGAGGAACTGGATATCTAGCGAGAACTTCTACTACGCGTTTCTCCGCGG	60
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Db	164	CCTCGGGAAAATGGGAGCTGCTGCAAAATGGCGTTTCGGCGTCTTCTTATCTCTCTGTTC	223
Qy	121	TTCAAGTGTCTATACITGGCAGATCAGAACTCAGGAGTGTCTTTTCTTTAATGCTAAATG	180
Db	224	TTCAAGTGTCTATCTTGTAGATCAGAACTCAGGAGTGTCTTTTCTTTAATGCTAAATG	283



APPLICANT: Mathews, Lawrence S.  
Vale, Wylie W.  
Tsuchida, Kunihiko  
TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF  
RECEPTOR(S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSER: Pretty, Schroeder, Brueggemann & Clark  
STREET: 444 South Flower Street, Suite 2000  
CITY: Los Angeles  
STATE: CA  
COUNTRY: USA  
ZIP: 90071  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/742,684  
FILING DATE: 19-Dec-2000  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/476,123  
FILING DATE: <Unknown>  
APPLICATION NUMBER: US 08/300,584  
FILING DATE: 02-SEP-1994  
APPLICATION NUMBER: US 07/880,220  
FILING DATE: 08-MAY-1992  
APPLICATION NUMBER: US 07/773,229  
FILING DATE: 09-OCT-1991  
APPLICATION NUMBER: US 07/698,709  
FILING DATE: 10-MAY-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Reiter, Stephen E.  
REGISTRATION NUMBER: 31,192  
REFERENCE/DOCKET NUMBER: P41 9927  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-546-4737  
TELEFAX: 619-546-9392  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2335 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
IMMEDIATE SOURCE:  
CLONE: XACTR  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 468..1997  
SEQUENCE DESCRIPTION: SEQ ID NO: 3:  
US-09-742-684-3  
Query Match 26.5%; Score 678.2; DB 9; Length 2335;  
Best Local Similarity 65.6%; Pred. No. 7.1e-170;  
Matches 1037; Conservative 2; Mismatches 526; Indels 15; Gaps 3;  
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DB 459 CCAGGAGATGGGGGGCTGTAGCGCTGACTTTCTACTCTTCTTCTTCTTCTTCTTCTT 518  
QY 122 TCAGGTGCTATCTTGGCAGATCAGAACTCAGGAGTGCTTTTCTTTTAACTGCTAATTGG 181  
DB 519 GCAGGCTCAGGACACGATCAAGTGGAGACAAGAGAGTGCATCTATTACAATGCCACTGG 578  
QY 182 GAAAPGACAGAACCACTGCTGTTGACCTTGTGACCTTGTGATGATGATGATGATGATGAT 241  
DB 579 GAACGTGAGAAAGCAACCAAGTGGGGTGGAAAGCTGCGAAGGGGAAAGGACAGCGA 638  
QY 242 CGACATTTTGTCTACTCTGGAAGATATTTCTGTTTCCATTGAAATAGTGAAGCAAGGT 301

DB 639 CTCACATGTTTACCGCTCTTTGGAGGAACAATTCGGCTTCATAGAGCTGGTGAAGAAAGGA 698  
QY 302 TGTGGCTGGATGATATCAACTGCTATGACAGGACTGATTCGTGTGNGAAAAAAGAGACGC 361  
DB 699 TGTGGCTGGATGATCACTCACTTATGACAGACAGGATGCTATTCGCAAGGAGAAAC 758  
QY 362 CTTGAAGTGATCTTTGTTGCTGTGAGGGCAATATGTGTATGAAAGTCTCTTATTTT 421  
DB 759 CCCCAAGTCTTTTCTGCTGTGGAGGAAACTACTGCAACAAGAAATTTACTCATTTG 818  
QY 422 CCGGAGATGGAAGTCACACAGCCCACTTCAATCTCTGTTCACCGAAGCCCACTTATTC 481  
DB 819 CTTGAAGTCGAACAATTGTATCCGAGCCCA-----GCCGTGAGCTCTCTACTG 869  
QY 482 AACATTCTGTATTCCTTGGTACCACTAAATGTAATGTCAGGAATGTCTATTTGTGCA 541  
DB 870 AACATTCTGTATTCCTTGGTACCACTTGTGTGCTTCTTCCATGGCAATTTCTCTGCG 929  
QY 542 TTTTGGGTGTACAGACATCAAGATGCGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 601  
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DB 987 CCGGTCTGCGCT 1046  
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DB 1047 AAGCGGCGAGCGCTTTGCGTTGCGTTGCGTTGCGTTGCGTTGCGTTGCGTTGCGTT 1106  
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QY 782 CTACTGGAATGAGCATGAGAACATCTACAGTCTCTCTCTCTCTCTCTCTCTCTCTCT 841  
DB 1167 ACGCGGGCATGAAACATGAAACCTATTTGGAGTTCATTTGCGCTGAGAAAGGGGAGC 1226  
QY 842 AGTGTGATGTGGACCTGTGGCTTAATCACAGCATTTTCAAGAAAGGGCTCACTGTGAC 901  
DB 1227 AACCTGAGATGGAGCTGTGGCTCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1286  
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DB 1287 TACCTGAAAGGGAACTTGGTGGAGTGAATGAGTGTCTCATATAACAGAAACAAATGG 1346  
QY 962 AGAGATTGGCATATTTACATGAGATATACCTGCTTAAAA-----GATGGCACAAGCT 1018  
DB 1347 CGTGGCTGGCTACTTACATGAAGATGTGCGCGCTGTAAAGGTGAAGGGCACAACCT 1406  
QY 1019 GCAATCTCTCAGGAGCATCAAAAGTAAATGTGCTGTGTGAAAGAAACATCTGACAGCT 1078  
DB 1407 GCAATCGCTCAGAGATTTTAAAGTAAGAAATGTATTTGCTTAAGAAACGACTGACTG 1466  
QY 1079 TGCAATGCTGACTTTGGGCTTAAAGTTCCAGGCTGCAAGTCTGCAAGGTGACACC 1138  
DB 1467 ATATTAGCACTTCGGCTGCGCTGCGCTGCGCTGCGCTGCGCTGCGCTGCGCTGCG 1526  
QY 1139 CATGGGCAAGTGTGTACCCGAGGTATATGCTCTCAGAGGTGTGTGGAGGGTGTCTATAAC 1198  
DB 1527 CACGGGCAAGTGTGGCACCAGGAGGTATATGCTCTCTGAGGTCTTAGAGGGGCAATTAAC 1586  
QY 1199 TTCGAAGGAGCGCATTTCTGAGGATGATATGACCGCTGAGGATAGTCTCTATGGGAA 1258  
DB 1587 TTTCAAGCGAGATTCCTTTCTCAGGATGATATGATGCTGAGGAGTGTCTCTGAGGAA 1646  
QY 1259 TTGGCTTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1318  
DB 1647 ATAGTATCCCGATGTACAGCAGCAGATGGGCGAGTAGATGATGATGATGATGATG 1706  
QY 1319 GAAGAAATGGCGAGCATCTCTCTTCAAGATATGAGGAGGTGTGTGTGTCATTAAGAA 1378  
DB 1707 GAAGGATTTGGGCAACATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1766

Qy 1379 AAGAGGCTGTTTAAAGAGATTATTGGCAGAAATCATGAGAAATGGCAATGCTCTGTGAA 1438  
Db 1767 ATAGCCCTGTATTCAAGACCACTGCTGAAACACCTGGTCTGGCCCACTGTGCTC 1826  
Qy 1439 ACGATAGAAGATTTGGATCATGATGCAAGCCAGAGTTATCAGCTGGATGTGTAGGT 1498  
Db 1827 ACCATTGAAGATCTGGGACCATGATGCGAAGCAGCGCTTTGGCGAGCTGCGTAGAG 1886  
Qy 1499 GAAGAATTTACTCAGATGCAAGACTAACAAATATCTTACTACAGAGGACATTTGAACA 1558  
Db 1887 GAGGTATTTCCAAATCCGTAATCATGTGAACGGCACTACCTCGGACTCCCTTGTATCC 1946  
Qy 1559 GTGTCACAATGCTGACAAATTTGACTTTCTCCCAAAGAACTAGTCTATGATGTGG 1618  
Db 1947 ATTGTTACATCTGTCACCAATGTGACTTTCGGGCCAAAGAGTCCAGTATCTGAGTTTC 2006  
Qy 1619 CACGCTGTACACACTGAG 1638  
Db 2007 TTTGGTCTTCCAGACTCAG 2026

## RESULT 5

US-09-878-178-688

; Sequence 688, Application US/09878178

; Patent No. US2002017752A1

; GENERAL INFORMATION:

; APPLICANT: Jiang, Yuqiu

; APPLICANT: Harlocker, Susan L.

; APPLICANT: Secrist, Heather

; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

; TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER

; FILE REFERENCE: 210121.527

; CURRENT APPLICATION NUMBER: US/09/878,178

; CURRENT FILING DATE: 2001-06-08

; NUMBER OF SEQ ID NOS: 2237

; SOFTWARE: Fast-Seq for Windows Version 4.0

; SEQ ID NO 688

; LENGTH: 452

; TYPE: DNA

; ORGANISM: Homo sapien

US-09-878-178-688

Query Match 15.7%; Score 403.6; DB 9; Length 452;  
Best Local Similarity 93.1%; Pred. No. 5.6e-97;  
Matches 421; Conservative 1; Mismatches 30; Indels 0; Gaps 0;

Qy 583 ACTTGTTCCTACTCAAGACCCAGGACCCACCCCTTCCCAATTAAGGTTGAGCC 642  
Db 1 ACTTGTTCCTCAACTCAAGACCCAGGACCCACCCCTTCCCAATTAAGGTTGAAACC 60  
Qy 643 ATTGCAGCTGTAGAGTGAAGCAAGGGAAGATTGGTTGTCTCTGGAAGCCCAAGTT 702  
Db 61 ACTGCAGTTATTAGAGTGAAGCAAGGGAAGATTGGTTGTCTCTGGAAGCCCAAGTT 120  
Qy 703 GCTCAATGAATATGTGCTGTCAAAATATTTCCAATACAGACAAACAGTCTGGCAGAA 762  
Db 121 GCTTAACGAATATGTGCTGTCAAAATATTTCCAATACAGACAAACAGTCTGGCAGAA 180  
Qy 763 TGAATATGAAGTCTATAGTCTACCTGGAATGAAGCAATGAGCACTACTCAGTTCAATGG 822  
Db 181 TGAATATGAAGTCTATAGTCTACCTGGAATGAAGCAATGAGCACTACTCAGTTCAATGG 240  
Qy 823 TGCAGAGAAAGAGGACCCAGTGTGGATGTGGACCTGTGGCTAATACAGCAATTTTCATGA 882  
Db 241 TGCAGAGAAAGAGGACCCAGTGTGGATGTGGACCTGTGGCTAATACAGCAATTTTCATGA 300  
Qy 883 AAAGGCTCACTGTACAGCTTTCTTAAGGCTAATGTGGTCTCTTGAATCARTTTGTCA 942  
Db 301 AAAGGCTCACTGTACAGCTTTCTTAAGGCTAATGTGGTCTCTTGAATCARTTTGTCA 360  
Qy 943 TATTGCAGAAACCATGCTAGAGATTGGCATATTTACATGAGGATATACCTGGCTTAA 1002

## RESULT 7

US-10-146-502-688

; Sequence 688, Application US/10146502

; Publication No. US20030069180A1

; GENERAL INFORMATION:

; APPLICANT: Jiang, Yuqiu

Db 361 TATTGCAGAAACCATGCTAGAGATTGGCATATTTACATGAGGATATACCTGGCCTAAA 420  
Qy 1003 AGATGGCCCAAGCCCTGCAATCTCTCACAGGG 1034  
Db 421 AGATGGCCCAAAACCTGCGCATATCTCACAGGG 452

## RESULT 6

US-10-046-935-688

; Sequence 688, Application US/10046935

; Publication No. US20020156011A1

; GENERAL INFORMATION:

; APPLICANT: Jiang, Yuqiu

; APPLICANT: Harlocker, Susan L.

; APPLICANT: Secrist, Heather

; APPLICANT: Wang, Aijun

; APPLICANT: Stoik, John A.

; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

; TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER

; FILE REFERENCE: 210121.527C1

; CURRENT APPLICATION NUMBER: US/10/046,935

; CURRENT FILING DATE: 2002-01-15

; NUMBER OF SEQ ID NOS: 2239

; SOFTWARE: Fast-Seq for Windows Version 4.0

; SEQ ID NO 688

; LENGTH: 452

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-046-935-688

Query Match 15.7%; Score 403.6; DB 14; Length 452;  
Best Local Similarity 93.1%; Pred. No. 5.6e-97;  
Matches 421; Conservative 1; Mismatches 30; Indels 0; Gaps 0;

Qy 583 ACTTGTTCCTACTCAAGACCCAGGACCCACCCCTTCCCAATTAAGGTTGAGCC 642  
Db 1 ACTTGTTCCTCAACTCAAGACCCAGGACCCACCCCTTCCCAATTAAGGTTGAAACC 60  
Qy 643 ATTGCAGCTGTAGAGTGAAGCAAGGGAAGATTGGTTGTCTCTGGAAGCCCAAGTT 702  
Db 61 ACTGCAGTTATTAGAGTGAAGCAAGGGAAGATTGGTTGTCTCTGGAAGCCCAAGTT 120  
Qy 703 GCTCAATGAATATGTGCTGTCAAAATATTTCCAATACAGGACAAACAGTCTGGCAGAA 762  
Db 121 GCTTAACGAATATGTGCTGTCAAAATATTTCCAATACAGGACAAACAGTCTGGCAGAA 180  
Qy 763 TGAATATGAAGTCTATAGTCTACCTGGAATGAAGCAATGAGCACTACTCAGTTCAATGG 822  
Db 181 TGAATATGAAGTCTATAGTCTACCTGGAATGAAGCAATGAGCACTACTCAGTTCAATGG 240  
Qy 823 TGCAGAGAAAGAGGACCCAGTGTGGATGTGGACCTGTGGCTAATACAGCAATTTTCATGA 882  
Db 241 TGCAGAGAAAGAGGACCCAGTGTGGATGTGGACCTGTGGCTAATACAGCAATTTTCATGA 300  
Qy 883 AAAGGCTCACTGTACAGCTTTCTTAAGGCTAATGTGGTCTCTTGAATCARTTTGTCA 942  
Db 301 AAAGGCTCACTGTACAGCTTTCTTAAGGCTAATGTGGTCTCTTGAATCARTTTGTCA 360  
Qy 943 TATTGCAGAAACCATGCTAGAGATTGGCATATTTACATGAGGATATACCTGGCTTAA 1002  
Db 361 TATTGCAGAAACCATGCTAGAGATTGGCATATTTACATGAGGATATACCTGGCTTAA 420  
Qy 1003 AGATGGCCCAAGCCCTGCAATCTCTCACAGGG 1034  
Db 421 AGATGGCCCAAAACCTGCGCATATCTCACAGGG 452

APPLICANT: Harlocker, Susan L.  
APPLICANT: Sectist, Heather  
APPLICANT: Wang, Aijun  
APPLICANT: Stolk, John A.  
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY  
FILE OF INVENTION: AND DIAGNOSIS OF COLON CANCER  
FILE REFERENCE: 210121.527C2  
CURRENT APPLICATION NUMBER: US/10/146,502  
CURRENT FILING DATE: 2002-05-14  
NUMBER OF SEQ ID NOS: 2241  
SOFTWARE: PastSeq for Windows Version 4.0  
SEQ ID NO 688  
LENGTH: 452  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-10-146-502-688

Query Match 15.7%; Score 403.6; DB 15; Length 452;  
Best Local Similarity 93.1%; Pred. No. 5.6e-97;  
Matches 421; Conservative 1; Mismatches 30; Indels 0; Gaps 0;  
QY 583 ACTTGTTCTACTAAGACCCAGGACCCACCCCTTCCCATTTACTAGGTTGAAGCC 642  
DB 1 ACTTGTTCAACTCAAGACCCAGGACCCACCCCTTCCCATTTACTAGGTTGAAGCC 60  
QY 643 ATTGCGCTGTTAGAAAGTGAAGCAAGGGAAGATTGGTTGTCTGGAAGCCAGTT 702  
DB 61 ACTGCGATTATTAGAAAGTGAAGCAAGGGAAGATTGGTTGTCTGGAAGCCAGTT 120  
QY 703 GGTCAATGAATATGTGGCTGTCAAAATATTTCCAAATACAGGACCAACAGCTCTGGCAGAA 762  
DB 121 GGTAAAGAAATATGTGGCTGTCAAAATATTTCCAAATACAGGACCAACAGCTCTGGCAGAA 180  
QY 763 TGAATATGAAGTCTATAGTCTACCTGGAATGAAGCAAGCAATACACTACAGTTCAATGG 822  
DB 181 TGAATACGAAGTCTACAGTTTCCCTGGAATGAAGCAAGCAATACACTACAGTTCAATGG 240  
QY 823 TCCAGAGAAAGAGGACCAAGGTCGAGTGGACCTGGCTGATCAAGCAAGCAATTCATCA 882  
DB 241 TCCAGAAACAGGACCAAGGTCGAGTGGACCTGGCTGATCAAGCAAGCAATTCATCA 300  
QY 883 AAAGGCTCACTGTCTCAGACTTTCTTAAAGCTAATGTGTTCTCTGGAATCACTTTGCA 942  
DB 301 AAAGGTTCACTATCAGACTTTCTTAAAGCTAATGTGTTCTCTGGAATCACTTTGCA 360  
QY 943 TATTGCAAGAACCATGGCTAGAGGATGSCATATTATACAGGATATACCTGGCTTAA 1002  
DB 361 TATTGCAAGAACCATGGCTAGAGGATGSCATATTATACAGGATATACCTGGCTTAA 420  
QY 1003 AGATGCCCAACAGCTGCAATCTCTCAGAGG 1034  
DB 421 AGATGCCCAACAGCTGCAATCTCTCAGAGG 452

RESULT 8  
US-10-108-605-156  
Sequence 156, Application US/10108605  
Publication No. US20020160934A1  
GENERAL INFORMATION:  
APPLICANT: Broadus, Julie  
APPLICANT: Stam, Lynn  
APPLICANT: Bachmann, Jane  
APPLICANT: Kamdar, Kim  
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES FROM DROSOPHILA MELANOGASTER THAT ENCODE  
TITLE OF INVENTION: PROTEINS ESSENTIAL FOR LARVAL VIABILITY AND USES THEREOF  
FILE REFERENCE: 31133B  
CURRENT APPLICATION NUMBER: US/10/108,605  
CURRENT FILING DATE: 2002-03-27  
PRIOR APPLICATION NUMBER: US 09/761,142  
PRIOR FILING DATE: 2001-01-16  
PRIOR APPLICATION NUMBER: US 60/176,418  
PRIOR FILING DATE: 2000-01-14  
NUMBER OF SEQ ID NOS: 361

SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 156  
LENGTH: 2657  
TYPE: DNA  
ORGANISM: Drosophila melanogaster  
US-10-108-605-156

Query Match 12.4%; Score 316.8; DB 14; Length 2657;  
Best Local Similarity 60.9%; Pred. No. 2.9e-73;  
Matches 570; Conservative 1; Mismatches 353; Indels 12; Gaps 3;  
QY 588 TTCCTACTCAGACCCAGGACCCACCCCTTCCCATTTACTAGGTTGAAGCCATTC 647  
DB 949 TACCCAGCAGGCTGAGATAAACAACCTCATGCCATTTCTCAGCAACCGTCCCATTC 1008  
QY 648 AGCTGTTAGAAAGTGAAGCAAGGGAAGATTGGTTGTCTGGAAGCCAGTTGCTCA 707  
DB 1009 AGCTGTTAGAAAGTGAAGCAAGGGAAGATTGGTTGTCTGGAAGCCAGTTGCTCA 1068  
QY 708 ATGAATATGCTGCTCAAAATATTTCCAAATACAGGACCAACAGCTCTGGCAGATGAAT 767  
DB 1069 ATCAGGATGTGGCGCTCAAGATCTTTCCCATGCGAGAAAGAAATCGTGGACCGAGC 1128  
QY 768 ATGAAGTCTATAGTCTACCTGGAATGAAGCATGAGACATACACTACAGTTCAATGGTGCGAG 827  
DB 1129 ACGATATCTACAGCTGCGCGCATGGCCATCCGACATCTCTCGAATTTCTTGGGCTTG 1188  
QY 828 AGAAAAGGACCAAGTGTGATGTGACCTGTGGCTAATCAGAGCATTTTCAAGAAAGG 887  
DB 1189 AGAA-----GCACATGGACAAAGCCGGAATATTGGCTGATATCCACCTACCGAGCATACG 1242  
QY 888 GCTCAGTCTCAGACTTTCTTAAAGCTAATGTGTTCTCTGGAATCACTTTGTCTATATTG 947  
DB 1243 GATCATTATGCGACTTCTCAATCGCACACGATCTCATGSCGAGAGTTGTGCCCATCG 1302  
QY 948 CAGAAACCATGGCTAGAGGATGGCATATTTTACATGAGGATATACCTGGCTTAA--AG 1004  
DB 1303 CTGAGTCCATGGCCATATGGACTGTCACATCTGCAAGGAGATCCCGCATCAAGACCG 1362  
QY 1005 ATGGCCACAGCTGCAATCTCTCAGAGGACATCAAGATTAAGATTTGCTGTTGAAA 1064  
DB 1363 ATGGCTTAAACCATCATAGTCTCAGGAGATTTCAAGTCTAAGACGATCTCTGTTAAGA 1422  
QY 1065 ACAATCTCAGACTTTGCAATTTGCTGCTTTGGCTTAAAGCTTCAAGCTCGAGCTGGCAAGT 1124  
DB 1423 GCGATCTGCGCTGTATAGCTGATTTGGTTTGGCCATGATATTCAGCCAGGCAAGC 1482  
QY 1125 CTGAGGTGACACCCATGGCGAGTTGGTACCCGAGGATATATGGCTCCAGAGGTGTTG 1184  
DB 1483 CTTGCGGCGATACACACGCTCAAGTAGGCACTCGACGTTACATGGCCCGAGAGTGTCTG 1542  
QY 1185 AGGCTGCTATAAATCTTCAAAGGAGCGCATTTCTGAGGATAGATATGTAGCCATGGGAT 1244  
DB 1543 AGGCTGCTATAAATCTTCAAAGGAGCGCATTTCTGAGGATAGATATGTAGCCATGGGAT 1602  
QY 1245 TAGTCTATGGAATGGCTTCTGTTGCACTGTCTGAGATGAGACCGGTAGATGAGTACA 1304  
DB 1603 TAGTCTCTGGGAAATGGTGTCAAGG--TGACTTTTGGCGGACCGCTGGTGGTGTTC 1659  
QY 1305 TGTTCACATTTGAGGAGAAATTCGCCAGCATTCATCTCTGAAAGATATGAGGAGTTG 1364  
DB 1660 AGCTGCTTTTGGGCGGAGCTGGGCTGAGCGCTGCTGCGAGAGTTTCAAGGAGATG 1719  
QY 1365 TTGTCATAAAAAAGAGCGCTGTTTAAAGAGATTTTGGCAGAAATATGCGAGAAATGAGGATGG 1424  
DB 1720 TGGTAATGAAGAGCTGGCGCTCGTTTGTCTCAACTCTGCGCGCGCCATCTCGGAGCTTA 1779  
QY 1425 CAATGCTCTGGAACCATGAGAAATGTTGGGATCATGATGAGAGAGCCAGGTTTATCAG 1484  
DB 1780 ATGTAATCTGCAACAATGAGGAGTCTGGGATCAGGCTGAGGCTGCTCTTAGCT 1839  
QY 1485 CTGATGTTAGTGAAGAAATTTACTCAGATGCAAA 1520

Db 1840 CTTGGTGTGTAATGGAACCGCTTTGGCGAGCTAAACA 1875

## RESULT 9

US-10-108-605-78  
; Sequence 78, Application US/10108605  
; Publication No. US20020160934A1  
; GENERAL INFORMATION:  
; APPLICANT: Broadus, Julie  
; APPLICANT: Stam, Lynn  
; APPLICANT: Bachmann, Jane  
; APPLICANT: Kamdar, Kim  
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES FROM DROSOPHILA MELANOGASTER THAT ENCODE  
; TITLE OF INVENTION: PROTEINS ESSENTIAL FOR LARVAL VIABILITY AND USES THEREOF  
; FILE REFERENCE: 31133B  
; CURRENT APPLICATION NUMBER: US/10/108,605  
; PRIOR FILING DATE: 2002-03-27  
; PRIOR APPLICATION NUMBER: US 09/761,142  
; PRIOR FILING DATE: 2001-01-16  
; PRIOR APPLICATION NUMBER: US 60/176,418  
; PRIOR FILING DATE: 2000-01-14  
; NUMBER OF SEQ ID NOS: 361  
; SOFTWARE: Patent In Ver. 2.1  
; SEQ ID NO 78  
; LENGTH: 2687  
; TYPE: DNA  
; ORGANISM: Drosophila melanogaster  
US-10-108-605-78

Query Match 12.4%; Score 316.8; DB 14; Length 2687;  
Best Local Similarity 60.9%; Pred. No. 3e-73;  
Matches 570; Conservative 1; Mismatches 353; Indels 12; Gaps 3;  
QY 588 TTCCTACTAGACCCAGACACCCACCCACCTCCCTCCCTACTAGGTTGAAGCCATTGC 647  
Db 979 TACCCACGACGAGGCTGAGATAACAAATCATCGCCATGTCTCAGCAACCGTCCCAATC 1038  
QY 648 AGCTGTTAGAGTGAAGCAAGGGAAGTTGGTGTCTGTGGAAGCCAGTTGCTCA 707  
Db 1039 AGCTGCTGNAACAGAGGSCAGTGTAGATTGGTGTGTTGGCAAGCCAGGCTCAACA 1098  
QY 708 ATGAATATGTGGCTGTCAAAATATTTCCAAATACAGACAAACAGTCTCTGGCAGATGAT 767  
Db 1099 ATCAGGATGTGGCGGTCAAGATCTTTTCGATGAGGAAAGAAATCGTGACCCAGGAGC 1158  
QY 768 ATGAATCTATAGTCTACCTGGAATGAAGCATGAGACATACATACATTTCTTGGTGCAG 827  
Db 1159 ACGATATCTACAGTCTGCGCGCTGCGGCTGCGGCTGCGGCTGCGGCTGCGGCTG 1218  
QY 828 AGAAAAGAGGCCACAGTGTGATGTGGACCTGTGGCTAATCAAGCAATTCATGAAGG 887  
Db 1219 AGAA-----GCACATGACAGCCGGAATATTTGGCTGATATCCACCTACAGCATAAGC 1272  
QY 888 GCTCACTGTACAGCTTTCTTAGGCTAATGTGGTCTCTTGGATCARTTTGTCTATATG 947  
Db 1273 GATCACTATGCGACTACCTCAATCGCACAGCATCTCATGGCCAGATTGTGCCCATG 1332  
QY 948 CAGAAACCATGGCTAGAGGATGGCCATATTTACATGAGGATFACCTGGCTTTAA--AG 1004  
Db 1333 CTGAGTCCATGGCCCAATGACATGACATCTGACAGGAGATCCGGCATCAAGACCG 1392  
QY 1005 ATGGCCACAGCTGCAATCTCTCAGAGGACATCAAAAGTAAATGTGCTTTGAANA 1064  
Db 1393 ATGGGTAAACCATCGATAGCTCACCAGACTTCAAGTCTAAGAACGTAAGTCTTTAAG 1452  
QY 1065 ACAATCTGACAGCTTGCATTTGCTGCTTTGGGTTGGCTTTAAAGTTTCAGGCTGGCAAGT 1124  
Db 1453 GCGATCTGACGCTGTATAGTGTGCTTTGGTTGGCCATGATATTTCCAGCCAGGCAAGC 1512  
QY 1125 CTGACGAGTACACCCATGGGCGAGTTGGTAACCGGAGGTATATGCTCCAGAGGTGTTGG 1184  
Db 1513 CTTGGCGGATACACAGGCTAAGTAGGCACTCGACGTTTACATGGCCCGCAGAGGTGCTTG 1572

QY 1185 AGGGTGTCTATAAACTTCCAAAGGGAGCGCAATTTCTGAGGATAGATATGTACGCGCATGGAT 1244  
Db 1573 AGGGTGTCCATCAATTTCAATAGAGACGCTTTCTACGATAGACGCTCTACGATCGGCC 1632  
QY 1245 TAGTCTATGGGAATTTGGCTCTCTGCTCAGCTGCTGCGAGATGAGACCCGCTAGATGAGTACA 1304  
Db 1633 TAGTCTCTGGGAATTTGGTGTACCGTG---TGACTTTCCCGGACCCGCTGCGTGTGAGTTCC 1689  
QY 1305 TGTTACCATTTTGGAGGAAGAAATTTGCCAGCATCCATCTCTTTGAAGATATGCAAGGAATTG 1364  
Db 1690 AGCTGCTTTTGGAGCCGAGCTGGGCGCTGAGGCGCTGCTGACGAAGTTCAAGAGAGTG 1749  
QY 1365 TTGTGCTATATAAAAGAGGCTGTTTAAAGATATTTGCGAGAAATGCGCAGCAATGCGAATGG 1424  
Db 1750 TGGTAATGAGAGAGCTGCGCCCTCGTTTGTCTCACTCTCTGGCGGCCCATTCGGGACTTA 1809  
QY 1425 CAATGCTCTGTGAACAGATAGAGAAATGTTGGGATCATGATGCAAGACCGAGTTATCAG 1484  
Db 1810 ATGTATTTCTGCGACACAATGGAGGAGTCTGGGATCAGAGCTGAGGCTCGTCTTAGCT 1869  
QY 1485 CTGGATGTGTAGGTGAAGAAATTTACTTCTAGATGCAAA 1520  
Db 1870 CTTGCTGTGTAATGGAACGCTTTGGCGAGCTAAACA 1905

## RESULT 10

US-09-918-995-30472  
; Sequence 30472, Application US/09918995  
; Publication No. US20030073623A1  
; GENERAL INFORMATION:  
; APPLICANT: Hyseq, Inc.  
; TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED  
; TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES  
; FILE REFERENCE: 20411-756  
; CURRENT APPLICATION NUMBER: US/09/918,995  
; CURRENT FILING DATE: 2001-07-30  
; PRIOR APPLICATION NUMBER: US/09/235,076  
; PRIOR FILING DATE: 1999-01-20  
; NUMBER OF SEQ ID NOS: 38054  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 30472  
; LENGTH: 535  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: (1) - (535)  
; OTHER INFORMATION: n = A,T,C or G  
US-09-918-995-30472

Query Match 9.3%; Score 238.2; DB 10; Length 535;  
Best Local Similarity 71.1%; Pred. No. 9.9e-53;  
Matches 328; Conservative 1; Mismatches 129; Indels 3; Gaps 1;  
QY 784 ACCTGGATGAGCATGAGACATACACTACAGTTTCTGTCAGAGAAAGAGGACCCAG 843  
Db 75 ACCTGGCATGAGACAGGACGACCTCTACAGTTTCTGTCGAGAGAGGAGGCTCCA 134  
QY 844 TGTGATGTGGACCTGTGGCTTAATCAGACGATTTTCATGAAAGGCTCTCACTGTGAGCTT 903  
Db 135 CCTCAAGTAGAGCTGTGGCTCATCAGCGCTTCCATGACAAGGCTCTCCCTCAGGATTA 194  
QY 904 TCTTAAGCTAATGTGGTCTCTTGAATCARTTTGTCTATTTGTCAGTAAACCATGGCTAG 963  
Db 195 CCTCAAGGGGAACATCATCATGGAACGAACTGTGTCTATGTAGCAAGAGCTGTACG 254  
QY 964 AGGATTTGCATATTTTACATGAGGATATACC---TGGCTTTAAAGATGGCCACAGCCTGC 1020  
Db 255 AGGCTCTCTACCTCTGATGAGATGTGCCCTGTGGTGGCGGAGGCGCAAGCGCTC 314  
QY 1021 AATCTCTCAGAGGACATCAAAAGTAAATAATGTGCTGTGTTGAAAAAATCTCAGAGCTTG 1080  
Db 315 TATTGCCACAGAGGACTTTTAAAGTAAGAAATGTTATTGCTGAAGAGCGACCTCAGACCGT 374



QY 1081 CATTGCTGACTTTGGTGGCTTAAAGTTTCAGAGCTGCAAGTCTGAGGTGACACCA 1140  
DB 375 GTGCTGCTGCTTTGGCTGGCTTGCATTTGAGCCAGGAAACCTCAGGGGACACCA 434  
QY 1141 TGGGAGGTGTGTACCGAGGTATATGCTCCAGAGGTGTGGAGGTGTCTATAAATT 1200  
DB 435 CGACAGGTAGCAGCAGAGCGTACATGCTCTCTGAGGTGTCTGAGGAGGACCATCACTT 494  
QY 1201 CCARAGGACGCAATTTCTGAGGATAGATATGACCCCATGG 1241  
DB 495 CCGAGAGATGCTTCTGCGCTTGACATGATGCCATGG 535

RESULT 11  
US-09-918-995-32124  
; Sequence 32124, Application US/09918995  
; Publication No. US20030073623A1  
; GENERAL INFORMATION:  
; APPLICANT: Hysseq, Inc.  
; TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED  
; FILE REFERENCE: 20411-756  
; CURRENT APPLICATION NUMBER: US/09/918,995  
; PRIOR FILING DATE: 2001-07-30  
; PRIOR APPLICATION NUMBER: US/09/235,076  
; PRIOR FILING DATE: 1999-01-20  
; NUMBER OF SEQ ID NOS: 38054  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 32124  
; LENGTH: 517  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc.feature  
; LOCATION: (1)...(517)  
; OTHER INFORMATION: n = A,T,C or G  
US-09-918-995-32124

Query Match 9.1%; Score 233; DB 10; Length 517;  
Best Local Similarity 68.8%; Pred. No. 2.4e-51;  
Matches 330; Conservative 1; Mismatches 146; Indels 3; Gaps 1;

QY 769 TGAAGTCTATAGTCTACCTGGAATGAAGCATGAGAACTACTACAGTTCAATTTGGTGAGA 828  
DB 37 TCANGCCTCGAACCCTCCGAGGAGCGACANAACTGCTACAGTTCAATTTGGTGCGA 96  
QY 829 GAAAGAGGACCAAGTGTGGATGTGAGCTGTGCTATATCAAGCATTTCAATTAAGAGG 888  
DB 97 GAAGCGAGGCTCCAACTCGAAGTAGAGCTGTGGCTCATCAGCGCTTCCATGACAGGG 156  
QY 889 CTCAGTGTGAGACTTTCTTAAGGCTAATGTGCTCTCTTGGATCACTTTGTCATATTGC 948  
DB 157 CTCCTCTCAGGATTAACCTCAGGGGACATCATCATGGAACGACTGTGTCTATGTAGC 216  
QY 949 AGAAACCATGCTAGAGGATTTGGCATATTTATCATGAGGATATACC---TGCTTTAAAGA 1005  
DB 217 AGAGACGATGTCAAGGAGCTCTCATACCTGATGAGGATGTGCTGCTGCTGCGGCA 276  
QY 1006 TGGCCACAGCTGCAATCTCTCAGAGGACATCAAAAGTAAATGTGCTTTCAAAA 1065  
DB 277 GGGCCACAGGCGCTTATTTGCCACAGGACTTTAAAGTAGAATGTATTTGCTGAAGAG 336  
QY 1066 CAATCTGACAGCTTGCTGCTATTTGGGTGGCTTTAAAGTTTCAGGCTTGGCAATGC 1125  
DB 337 CGACCTCAGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 396  
QY 1126 TCGAGTGCACACCACTGGGAGGTGTGACCGGAGGTATATGCTCCAGAGGTGTGGA 1185  
DB 397 TCCAGGAGACCCACCGACAGGTAGGACGAGCGTACATGCTGCTGAGGTGCTCGA 456  
QY 1186 CGGTCTATAAATTTCCAAAGGAGCGCATTTCTGAGGATAGATATGTACGCCATGGGATT 1245

DB 457 GGGAGCCATCAACTTCCAGAGAGATGCTTCTCGGCATTACATGATGCGGNGTT 516

RESULT 12  
US-09-918-995-24126  
; Sequence 24126, Application US/09918995  
; Publication No. US20030073623A1  
; GENERAL INFORMATION:  
; APPLICANT: Hysseq, Inc.  
; TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED  
; FILE REFERENCE: 20411-756  
; CURRENT APPLICATION NUMBER: US/09/918,995  
; CURRENT FILING DATE: 2001-07-30  
; PRIOR APPLICATION NUMBER: US/09/235,076  
; PRIOR FILING DATE: 1999-01-20  
; NUMBER OF SEQ ID NOS: 38054  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 24126  
; LENGTH: 504  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc.feature  
; LOCATION: (1)...(504)  
; OTHER INFORMATION: n = A,T,C or G  
US-09-918-995-24126

Query Match 8.8%; Score 225.6; DB 10; Length 504;  
Best Local Similarity 69.0%; Pred. No. 2.2e-49;  
Matches 322; Conservative 1; Mismatches 141; Indels 3; Gaps 1;

QY 806 ATACTACAGTTCAATTTGTCAGAGAAAGAGGACCAAGTGTGATGTGGACCTGTGGCTA 865  
DB 37 ATTGCGCCAGAGATTGCTGCCGAGAGCGAGGCTCCAACTCGAAGTAGAGCTGTGGCTC 96  
QY 866 ATCACAGCATTTTCATGAAAGGCTCACTGTCAAGCTTTCTTAAGGCTAATGTGGTCTCT 925  
DB 97 ATCAGCGCTTCCATGACAGAGGCTCCTCAGCGATTACCTCAAGGGAAACATCATACA 156  
QY 926 TGAATCACTTTGTTCATATTGAGAAACCATGGCTAGAGGATTTGGCATTTTACATGAG 985  
DB 157 TGGAAACCAACTGTGTCTATGTAGCAGAGACGATGTACGAGGCTCTCATACCTGCTAG 216  
QY 986 GATATACC---TGCTTTAAAGATGGCCACAGCTGCACTCTCTCACAGGACATCAAA 1042  
DB 217 GATGTGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 276  
QY 1043 AGTAAAAATGCTGTGTTGAAAAAACAATCTGACAGCTTTGCAATTTGCTGCTTGGGTGGCC 1102  
DB 277 AGTAAGAAATGATTTGCTGAAGAGCGACTCAAGCGCTGCTGCTGCTGCTGCTGCTGCT 336  
QY 1103 TTAAGTTGAGGCTGCGAGTCTGCGAGGTGACACCCATGGGAGGTGCTTACCGGAGG 1162  
DB 337 GTTCGATTTGAGCGCAGGAAACCTCCAGGGGACACCCAGGAGGTAGGACGAGACGG 396  
QY 1163 TATATGCTCCAGAGGTGTTGGAGGCTGCTATATAACTTCCAAAGGAGCGCATTTCTGAGG 1222  
DB 397 TACATGCTCTCTGAGGTGCTGAGGAGGACCATCACTTCCAGAGAGATGCTTCTCTGCGC 456  
QY 1223 ATAGATATGACGCCATGGAATTAGTCTTATGGAATTTGGCTTCTG 1269  
DB 457 ATTGACATGATGCCATGNGTTGGTGTCTGTGGAGCTTGTGTCTG 503

RESULT 13  
US-09-878-905-10  
; Sequence 10, Application US/09878905  
; Patent No. US20020064786A1  
; GENERAL INFORMATION:  
; APPLICANT: Markowitz, Sanford D  
; APPLICANT: Brattain, Michael G  
; APPLICANT: Willson, James K.V.



;; TITLE OF INVENTION: CANCER DIAGNOSIS, PROGNOSIS AND THERAPY BASED ON  
;; FILE OF INVENTION: MUTATION OF RECEPTOR

;; FILE REFERENCE: 062361.0108

;; CURRENT APPLICATION NUMBER: US/09/878,905

;; CURRENT FILING DATE: 2001-06-13

;; PRIOR APPLICATION NUMBER: 08/417,867

;; PRIOR FILING DATE: 1995-04-07

;; NUMBER OF SEQ ID NOS: 11

;; SOFTWARE: PatentIn Ver. 2.1

;; SEQ ID NO 10

;; LENGTH: 2090

;; TYPE: DNA

;; ORGANISM: human

;; FEATURE:

;; NAME/KEY: CDS

;; LOCATION: (336)..(2036)

US-09-878-905-10

Query Match 6.6%; Score 168.2; DB 9; Length 2090;  
Best Local Similarity 53.8%; Pred. No. 1.3e-33;  
Matches 441; Conservative 0; Mismatches 363; Indels 15; Gaps 4;

Qy	709	TGAATATGTGGCTGTCAAATATTTCCAAATACAGGACAAACAGTCTCTGGCAGAAATGAATA	768
Db	1148	TGAGACAGTGGCAGTCAAGATCTTCCCTATGAGAGTATGCCCTCTTGGGAACACAGAA	1207
Qy	769	TGAAGTCTATAGTCTACCTGGATGAAGCATGAGACATACATACAGTTCATTGGTGCAGA	828
Db	1208	GGACATCTTCTCAGACATCAATCTGAAGCATGAGAAACATACCTCCAGTTCCTGACGGCTGA	1267
Qy	829	GAAAGAGGACACAGTGTGGATGTGGACCTGTGGCTAATCAGACAGATTTTCATGAAAGGG	888
Db	1268	GGAGCGAAGCGAGTTGGGGAACATATCTGGCTATCAGCCCTTCCAGCCCAAGGG	1327
Qy	889	CTCAGTCTAGACTTCTTAAAGCTTAAGCTTAAGCTTAAGCTTAAGCTTAAGCTTAAGCT	948
Db	1328	CAACCTACAGGAGTACCTGACGGGCTATCTCATCAGTGGGAGGACCTGCGCAAGCTGG	1387
Qy	949	AGAACCCATGGCTAGAGGATTCGCATATTTACATGAGGATATACCTGGCTTAAAGATGG	1008
Db	1388	CAGTCTCTCTGGCCGGGGATTTCTCCTCCACAGTGAATCAGACT---CCATGTGGAG	1444
Qy	1009	CCACAGCCCTGCAATCTCTCAGAGGACATCAAAAGTAAAAATGTCTGTGAAAAACAA	1068
Db	1445	GCCCAAGATGCCATGTGCACAGGGACCTCAAGAGCTCCAAATATCTCTGTGAAGAACGA	1504
Qy	1069	TCGACAGCTTGCATCTCTGACTTTGGCTTAAAGTTTGAGGCTGGCAAGCTGC	1128
Db	1505	CCTAACCTGTGCTGTGACTTTGGGCTTTCCCTGCTGAGCCCTACTCTGTCTGT	1564
Qy	1129	AGGTGAC-----ACCCATGGCAGGTTGGTACCCGGAGGTATATGGCTCCAGAGGTGT	1182
Db	1565	GGATGACCTGGCTTAACAGTGGCAGGTGGGAACCTGCAAGATACATGGCTCCAGAGTCT	1624
Qy	1183	GGAGGTGCTATAAACTTCCAAA---GGGACGCAATTTCTGAGGATAGATATACGCCAT	1239
Db	1625	AGAATCCAGGATGAATTTGGAGATGCTGAGTCTTCAAGCAGACCGATGTCTACTTCAT	1684
Qy	1240	GGGATTAAGTCTATGGCAATTTGGCTTCTGTTGCACTGCTGCAGATGGAACCCGTAGATGA	1299
Db	1685	GGCTCTGTGCTGTGGGAATGACATCTGCTG---TAATGCAAGTGGGAGAGTAAAGA	1741
Qy	1300	GTACATGTTACCATTTGAGGAAGAAATGGCCAGCATCTCTCTTGAAGATATGAGGA	1359
Db	1742	TTATGAGCCCTCCATTTGGTTTCCAGGTGCGGAGCACCCCTGTGTGCAAAAGCATGAAGGA	1801
Qy	1360	AGTTGTTGTGATAAAAAAGAGGCTGTTTAAAGAGATTTATTTGGCAGAAAAATGCAGG	1419
Db	1802	CAACGTTTGAAGATCGAGGCGACAGCAAAATTTCCAGCTTTCTGGCTCAACCAACGAGG	1861
Qy	1420	AATGGCAATGCTCTGTCAAAACGATAGAAAGATTTGGGATCATGATGCAAGACCCAGTT	1479
Db	1862	CATCCAGATGCTGTGAGACGTTGACTGAGTGTGGGAGCAACGACCCAGAGGCCCTCT	1921

Qy 1480 ATCAGCTGGATGTGTAGTCAAAAGAAATTAATCAGATGCA 1518  
Db 1922 CACAGCCAGTGTGTGGCAGAACGCTTCAAGTGAAGCTGGA 1960

RESULT 14

US-10-646-640-10

;; Sequence 10, Application US/10646640

;; Publication No. US20040038284A1

;; GENERAL INFORMATION:

;; APPLICANT: Markowitz, Sanford D

;; APPLICANT: Brattain, Michael G

;; APPLICANT: Willson, James K.V.

;; TITLE OF INVENTION: CANCER DIAGNOSIS, PROGNOSIS AND THERAPY BASED ON

;; TITLE OF INVENTION: MUTATION OF RECEPTOR

;; FILE REFERENCE: 062361.0108

;; CURRENT APPLICATION NUMBER: US/10/646,640

;; CURRENT FILING DATE: 2003-08-21

;; PRIOR APPLICATION NUMBER: US/09/878,905

;; PRIOR FILING DATE: 2001-06-13

;; PRIOR APPLICATION NUMBER: 08/417,867

;; PRIOR FILING DATE: 1995-04-07

;; NUMBER OF SEQ ID NOS: 11

;; SOFTWARE: PatentIn Ver. 2.1

;; SEQ ID NO 10

;; LENGTH: 2090

;; TYPE: DNA

;; ORGANISM: human

;; FEATURE:

;; NAME/KEY: CDS

;; LOCATION: (336)..(2036)

US-10-646-640-10

Query Match 6.6%; Score 168.2; DB 13; Length 2090;  
Best Local Similarity 53.8%; Pred. No. 1.3e-33;  
Matches 441; Conservative 0; Mismatches 363; Indels 15; Gaps 4;

Qy	709	TGAATATGTGGCTGTCAAATATTTCCAAATACAGGACAAACAGTCTCTGGCAGAAATGAATA	768
Db	1148	TGAGACAGTGGCAGTCAAGATCTTCCCTATGAGAGTATGCCCTCTTGGGAACACAGAA	1207
Qy	769	TGAAGTCTATAGTCTACCTGGATGAAGCATGAGACATACATACAGTTCATTGGTGCAGA	828
Db	1208	GGACATCTTCTCAGACATCAATCTGAAGCATGAGAAACATACCTCCAGTTCCTGACGGCTGA	1267
Qy	829	GAAAGAGGACACAGTGTGGATGTGGACCTGTGGCTAATCAGACAGATTTTCATGAAAGGG	888
Db	1268	GGAGCGAAGCGAGTTGGGGAACATACATACCTGATCAGCCCTTCCAGCCCAAGGG	1327
Qy	889	CTCAGTCTAGACTTCTTAAAGCTTAAGCTTAAGCTTAAGCTTAAGCTTAAGCTTAAGCT	948
Db	1328	CAACCTACAGGAGTACCTGACGGGCTATCTCATCAGTGGGAGGACCTGCGCAAGCTGG	1387
Qy	949	AGAACCCATGGCTAGAGGATTCGCATATTTACATGAGGATATACCTGGCTTAAAGATGG	1008
Db	1388	CAGTCTCTCTGGCCGGGGATTTCTCCTCCACAGTGAATCAGACT---CCATGTGGAG	1444
Qy	1009	CCACAGCCCTGCAATCTCTCAGAGGACATCAAAAGTAAAAATGTCTGTGAAAAACAA	1068
Db	1445	GCCCAAGATGCCATGTGCACAGGGACCTCAAGAGCTCCAAATATCTCTGTGAAGAACGA	1504
Qy	1069	TCGACAGCTTGCATCTCTGACTTTGGCTTAAAGTTTGAGGCTGGCAAGCTGC	1128
Db	1505	CCTAACCTGTGCTGTGACTTTGGGCTTTCCCTGCTGAGCCCTACTCTGTCTGT	1564
Qy	1129	AGGTGAC-----ACCCATGGCAGGTTGGTACCCGGAGGTATATGGCTCCAGAGGTGT	1182
Db	1565	GGATGACCTGGCTTAACAGTGGCAGGTGGGAACCTGCAAGATACATGGCTCCAGAGTCT	1624
Qy	1183	GGAGGTGCTATAAACTTCCAAA---GGGACGCAATTTCTGAGGATAGATATACGCCAT	1239
Db	1625	AGAATCCAGGATGAATTTGGAGATGCTGAGTCTTCAAGCAGACCGATGTCTACTTCAT	1684
Qy	1240	GGGATTAAGTCTATGGCAATTTGGCTTCTGTTGCACTGCTGCAGATGGAACCCGTAGATGA	1299
Db	1685	GGCTCTGTGCTGTGGGAATGACATCTGCTG---TAATGCAAGTGGGAGAGTAAAGA	1741
Qy	1300	GTACATGTTACCATTTGAGGAAGAAATGGCCAGCATCTCTCTTGAAGATATGAGGA	1359
Db	1742	TTATGAGCCCTCCATTTGGTTTCCAGGTGCGGAGCACCCCTGTGTGCAAAAGCATGAAGGA	1801
Qy	1360	AGTTGTTGTGATAAAAAAGAGGCTGTTTAAAGAGATTTATTTGGCAGAAAAATGCAGG	1419
Db	1802	CAACGTTTGAAGATCGAGGCGACAGCAAAATTTCCAGCTTTCTGGCTCAACCAACGAGG	1861
Qy	1420	AATGGCAATGCTCTGTCAAAACGATAGAAAGATTTGGGATCATGATGCAAGACCCAGTT	1479
Db	1862	CATCCAGATGCTGTGAGACGTTGACTGAGTGTGGGAGCAACGACCCAGAGGCCCTCT	1921

QY 1240 GGGATTAGTCTATGAGGAATGGCTTCTCGTTGCACTGCTGCAGATGAGCCGCTAGATGA 1299  
DB 1685 GGCTCTGGTGTCTCGGAAATGACATCTCGCTG---TAATGCAAGTGGGAGAGTAAAGA 1741  
QY 1300 GTACATGTTACCAATTTGAGGAAGAATGGCCAGCATCCATCTCTTGAAGATATGACGA 1359  
DB 1742 TTATGAGCCTCCATTTGGTTCCAAAGGTGGGGAGCACCCTGTGTGAAAGCATGAAGA 1801  
QY 1360 AGTTGTTGTCATAAAAAAGAGGCGCTGTTTAAAGAGATTAATGGCAGAAACATGCGAG 1419  
DB 1802 CAACGTGTTGAGAGATCGAGGCGCACAGAAATTCACAGCTTCTCGCTCAACCCACAGG 1861  
QY 1420 ATGGCAATGCTCTGTGAACCATAGAGAAATGTTGGGATCATGATGAGAGAGCCAGGTT 1479  
DB 1862 CATCCAGATGGTGTGAGACGTTGACTGAGTGTGGGACCAAGCCAGAGGCGCGTCT 1921  
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DB 1922 CACAGCCAGTGTGTGCGAGAACGCTTCAGTGAGCTGGA 1960

## RESULT 15

US-09-888-361-17  
; Sequence 17, Application US/09888361  
; Publication No. US20030064944A1  
; GENERAL INFORMATION:  
; APPLICANT: Susan Murray  
; APPLICANT: Jacqueline Warr  
; TITLE OF INVENTION: ANTISENSE MODULATION OF TRANSFORMING GROWTH FACTOR BETA RECEPTOR  
; TITLE OF INVENTION: EXPRESSION  
; FILE REFERENCE: RTS-0158  
; CURRENT APPLICATION NUMBER: US/09/888,361  
; CURRENT FILING DATE: 2001-06-21  
; NUMBER OF SEQ ID NOS: 163  
; SEQ ID NO 17  
; LENGTH: 2090  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (336)...(2039)  
US-09-888-361-17

Query Match 6.6%; Score 168.2; DB 13; Length 2090;  
Best Local Similarity 53.8%; Pred. No. 1.3e-33;  
Matches 441; Conservative 0; Mismatches 363; Indels 15; Gaps 4;  
QY 709 TGAATATGCTGCTCAAAATATTTCCATACAGGACACACAGTCTCGGCAAGTGAATA 768  
DB 1148 TGAGCAGTGGCAGTCAAGATCTTCCCTATGAGGAGTATGCTCTTGGAGACAGAGAA 1207  
QY 769 TGAAGTCTATAGTCTACCTCGAATGAAGCATGAGAACATACATACAGTTCATTTGGTGCAGA 828  
DB 1208 GGACATCTTCTCAGACATCAATCTGAAGCATGAGAACATACCTCCAGTTCTGACGCTGA 1267  
QY 829 GAAAGAGCCAGCAGTGTGATGTGGACCTGTGGCTAATCAGGCAATTCATGAAAGGG 888  
DB 1268 GGAGCGGAGAGCGGAGTTGGGAAAACAATCTGGCTGATCACCGCTTCCACGCCAAGGG 1327  
QY 889 CTCACCTGTACAGACTTTCTTAAGCTAATGTGTCTCTTGAATCACTTTGTCATATTGC 948  
DB 1328 CAACTTACAGGAGTACTCTAGCGGCGATCTCATCAGCTGGGAGGACCTGGCAAGCTGG 1387  
QY 949 AGAAACCATGGTAGGAGTGGCATATTATTAATAGGGATATACCTGGCTTAAAGATGG 1008  
DB 1388 CAGCTCCCTCGCCGGGGATGCTCACCTCCACAGTATCACACT---CCATGTGGGAG 1444  
QY 1009 CCACAGCCTGCAATCTCTCAGAGGACATCAAAATGCTGTTTCAAAACAA 1068  
DB 1445 GCCCAGATGCCCATCGTGCACAGGACCTCAAGAGCTCCAAATATCTCTGTCAGAGCA 1504

QY 1069 TCTCAGAGCTTGCAATGCTGACTTTGGGTTGGCCTTAAAGTTCAGAGCTGCGCAAGTCTGC 1128  
DB 1505 CCTAACCTGCTGCTGTGTGACTTTGGGCTTTCCCTGCGTCTGGAGCCCTACTCTGTCTGT 1564  
QY 1129 AGGTGAC-----ACCCATGGGCGAGGTTGGTACCCGAGGTATATGCTCCAGAGGTTGT 1182  
DB 1565 CGATGACCTGGCTAACAGTGGGCGAGTGGGAACCTGCAAGATACATGGCTCCAGAAAGTCT 1624  
QY 1183 GGAGGTGCTATAAACTTCCAAA---GGGACGCAATTTCTGAGGATAGATATGTAGCCAT 1239  
DB 1625 AGAATCCAGGATGAATTTGGAGAAATGATCTGCTTCAAGCAGACCGATGTCTACTCCAT 1684  
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DB 1685 GGCTCTGTGCTCTGGGAAATGATCTCGCTG---TAATGCAAGTGGGAGAGTAAAGA 1741  
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DB 1742 TTATGAGCCTCCATTTGGTTTCCAAGGTGCGGAGCACCCCTGTGTGAAAGCATGAAGA 1801  
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DB 1802 CAACGTGTTGAGAGATCGAGGCGCACAGAAATTCACAGCTTCTGGCTCAACCCAGGG 1861  
QY 1420 AATGCAATGCTCTGTGAAACGATAGAAAGATTTGGGATCATGATGAGAGGCGAGGTT 1479  
DB 1862 CATCCAGATGGTGTGTGAGACGTTGACTGAGTGTGGGACCAAGCCAGGAGGCGCTCT 1921  
QY 1480 ATCAGCTGATGTGTAGTGAAGAAATTAATCTCAGATGCA 1518  
DB 1922 CACAGCCAGTGTGTGCGAGAACGCTTCAGTGAGCTGGA 1960

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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

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(without alignments)  
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Title: US-09-742-684A-16

Perfect score: 2770  
Sequence: 1 MGAALKAFVFLISCSGA.....IVTVVTWTVNVPFPPKESL 513

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1163542 seqs, 282313646 residues

Total number of hits satisfying chosen parameters: 1163542

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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2	1971.5	71.2	510	9 US-09-742-684-4	Sequence 4, Appli
3	1455.5	52.5	346	15 US-10-367-241A-2	Sequence 2, Appli
4	1150.5	41.5	516	13 US-10-108-605-79	Sequence 79, Appli
5	1147.5	41.4	516	13 US-10-108-605-157	Sequence 157, App
6	775.5	28.0	530	15 US-10-463-190-111	Sequence 111, App
7	775.5	28.0	530	15 US-10-463-190-112	Sequence 112, App
8	775.5	28.0	567	9 US-09-878-905-11	Sequence 11, Appl
9	775.5	28.0	567	12 US-10-646-640-11	Sequence 11, Appl
10	775.5	28.0	567	15 US-10-394-322A-62	Sequence 62, Appl
11	775.5	28.0	567	16 US-10-408-765A-1236	Sequence 1236, Ap
12	775.5	28.0	592	10 US-09-917-788-5	Sequence 5, Appli
13	775.5	28.0	1038	9 US-09-908-500A-2	Sequence 2, Appli
14	775.5	28.0	1038	14 US-10-286-152A-42	Sequence 42, Appl
15	775.5	28.0	1038	15 US-10-463-190-113	Sequence 113, App

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16 775.5 28.0 1038 15 US-10-463-190-114 Sequence 114, App
17 775.5 28.0 1038 15 US-10-463-190-115 Sequence 115, App
18 775.5 28.0 1038 16 US-10-457-030-2 Sequence 2, Appli
19 775.5 28.0 1038 16 US-10-408-765A-2369 Sequence 2369, Ap
20 770.5 27.8 567 16 US-10-648-593-197 Sequence 197, App
21 681 24.6 1080 9 US-09-904-380-2 Sequence 2, Appli
22 674 24.3 532 9 US-09-903-068-6 Sequence 6, Appli
23 674 24.3 532 9 US-09-982-543A-6 Sequence 6, Appli
24 674 24.3 532 14 US-10-153-217-2 Sequence 2, Appli
25 674 24.3 532 14 US-10-286-152A-38 Sequence 38, Appli
26 674 24.3 532 15 US-10-463-190-102 Sequence 102, App
27 669 24.2 532 9 US-09-903-068-14 Sequence 14, Appli
28 664 24.0 532 9 US-09-874-628-2 Sequence 2, Appli
29 664 24.0 532 15 US-10-463-190-105 Sequence 105, App
30 664 24.0 532 15 US-10-463-190-106 Sequence 106, App
31 664 24.0 532 15 US-10-463-190-107 Sequence 107, App
32 664 24.0 532 15 US-10-463-190-110 Sequence 110, App
33 653.5 23.6 502 9 US-09-874-628-4 Sequence 4, Appli
34 653.5 23.6 502 12 US-10-058-270A-6 Sequence 6, Appli
35 653.5 23.6 502 13 US-10-044-716-14 Sequence 14, Appli
36 653.5 23.6 502 14 US-10-286-152A-40 Sequence 40, Appli
37 653.5 23.6 502 14 US-10-139-814-14 Sequence 14, Appli
38 653.5 23.6 502 14 US-10-241-220-112 Sequence 112, App
39 653.5 23.6 502 14 US-10-169-051-2 Sequence 2, Appli
40 653.5 23.6 502 15 US-10-295-027-68 Sequence 68, Appli
41 653.5 23.6 502 15 US-10-295-027-789 Sequence 789, App
42 653.5 23.6 502 15 US-10-295-027-887 Sequence 837, App
43 653.5 23.6 502 15 US-10-295-027-881 Sequence 881, App
44 653.5 23.6 502 15 US-10-173-999-64 Sequence 64, Appli
45 653.5 23.6 502 15 US-10-463-190-103 Sequence 103, App
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#### ALIGNMENTS

#### RESULT 1

US-09-742-684-2

: Sequence 2, Application US/09742684

: Patent No. US20010039036A1

: GENERAL INFORMATION:

: APPLICANT: Mathews, Lawrence S.

: Teuchida, Kunihito

: TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF

: RECEPTOR(S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY

: NUMBER OF SEQUENCES: 14

: CORRESPONDENCE ADDRESS:

: ADDRESSEE: Pretty, Schroeder, Brueggemann & Clark

: STREET: 444 South Flower Street, Suite 2000

: CITY: Los Angeles

: STATE: CA

: COUNTRY: USA

: ZIP: 90071

: COMPUTER READABLE FORM:

: MEDIUM TYPE: Floppy disk

: COMPUTER: IBM PC compatible

: OPERATING SYSTEM: PC-DOS/MS-DOS

: SOFTWARE: PatentIn Release #1.0, Version #1.25

: CURRENT APPLICATION DATA:

: APPLICATION NUMBER: US/09/742,684

: FILING DATE: 19-Dec-2000

: CLASSIFICATION: <Unknown>

: PRIORITY DATA:

: APPLICATION NUMBER: 08/476,123

: FILING DATE: <Unknown>

: APPLICATION NUMBER: US 08/300,584

: FILING DATE: 02-SEP-1994

: APPLICATION NUMBER: US 07/880,220

: FILING DATE: 08-MAY-1992

: APPLICATION NUMBER: US 07/773,229

: FILING DATE: 09-OCT-1991

: APPLICATION NUMBER: US 07/698,709

: FILING DATE: 10-MAY-1991

ATTORNEY/AGENT INFORMATION:  
NAME: Reiter, Stephen E.  
REGISTRATION NUMBER: 31,192  
REFERENCE/DOCKET NUMBER: P41 9927  
TELEPHONE: 619-546-4737  
TELEFAX: 619-546-9392  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 513 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 2:  
US-09-742-684-2

Query Match 99.7%; Score 2763; DB 9; Length 513;  
Best Local Similarity 99.4%; Pred. No. 5.4e-231; Indels 0; Gaps 0;  
Matches 510; Conservative 3; Mismatches 0;

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DB 1 MGAALKAFVFLISCSGAILGRSETQCLFFNANWEKDRNTQGVPCYGDKKRRHC 60  
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DB 61 FATWNISSISIVKQGCWLDINCVDRTDCVEKDSPEVYFCCCGNCKEKSYPPEM 120  
QY 121 EVTQPTSNVTPKPPYNNILYSLVPLMLIAGIVICAFWYVRRHKKMAYPPVLVPTQDPGP 180  
DB 121 EVTQPTSNVTPKPPYNNILYSLVPLMLIAGIVICAFWYVRRHKKMAYPPVLVPTQDPGP 180  
QY 181 PPPSPLLGLKPLQLLEVKARGFCVWKQAQLNNEYAVKIPIQDKQSNQYEVYSLPG 240  
DB 181 PPPSPLLGLKPLQLLEVKARGFCVWKQAQLNNEYAVKIPIQDKQSNQYEVYSLPG 240  
QY 241 MKHENILOFIGAERKGTSDVDLMLITAFHEKGSLSDFLKNVWSNOLCHIAETMARGL 300  
DB 241 MKHENILOFIGAERKGTSDVDLMLITAFHEKGSLSDFLKNVWSNOLCHIAETMARGL 300  
QY 301 AYLHEDIPLGKHPAISHRDIKSNVLLKNNLTACIADPGLAKFEAGKSAGDTHQGV 360  
DB 301 AYLHEDIPLGKHPAISHRDIKSNVLLKNNLTACIADPGLAKFEAGKSAGDTHQGV 360  
QY 361 GTRRYMAPEVLEGAINFQDAFLRIDMYANGLVWELASRCTAAGDPVDEYMLPPEEIG 420  
DB 361 GTRRYMAPEVLEGAINFQDAFLRIDMYANGLVWELASRCTAAGDPVDEYMLPPEEIG 420  
QY 421 QHPSLDMQEVVYVHKKRPVLRDYWKQKAGMAMLCETIEECWDHDAEARSAGCVGERIT 480  
DB 421 QHPSLDMQEVVYVHKKRPVLRDYWKQKAGMAMLCETIEECWDHDAEARSAGCVGERIT 480  
QY 481 QMORLTNLTITDITVTVTWNTVNDPPPKESSL 513  
DB 481 QMORLTNLTITDITVTVTWNTVNDPPPKESSL 513

RESULT 2  
US-09-742-684-4  
Sequence 4, Application US/09742684  
Patent No. US20010039036A1  
GENERAL INFORMATION:  
APPLICANT: Mathews, Lawrence S.  
Vale, Wylie W.  
Tsuchida, Kunihiko  
TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF  
RECEPTOR(S) OF THE ACTIVIN/TGF-BETA SUPERFAMILY  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pretty, Schroeder, Brueggemann & Clark  
STREET: 444 South Flower Street, Suite 2000  
CITY: Los Angeles  
STATE: CA

COUNTRY: USA  
ZIP: 90071  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/742,684  
FILING DATE: 19-Dec-2000  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/476,123  
FILING DATE: <Unknown>  
APPLICATION NUMBER: US 08/300,584  
FILING DATE: 02-SEP-1994  
APPLICATION NUMBER: US 07/880,220  
FILING DATE: 08-MAY-1992  
APPLICATION NUMBER: US 07/773,229  
FILING DATE: 09-OCT-1991  
APPLICATION NUMBER: US 07/698,709  
FILING DATE: 10-MAY-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Reiter, Stephen E.  
REGISTRATION NUMBER: 31,192  
REFERENCE/DOCKET NUMBER: P41 9927  
TELEPHONE: 619-546-4737  
TELEFAX: 619-546-9392  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 510 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 4:  
US-09-742-684-4

Query Match 71.2%; Score 1971.5; DB 9; Length 510;  
Best Local Similarity 67.9%; Pred. No. 2.6e-162; Indels 5; Gaps 3;  
Matches 349; Conservative 85; Mismatches 75;

QY 1 MGAALKAFVFLISCSGAILGRSETQCLFFNANWEKDRNTQGVPCYGDKKRRHC 60  
DB 1 MGAALKAFVFLISCSGAILGRSETQCLFFNANWEKDRNTQGVPCYGDKKRRHC 60  
QY 61 FATWNISSISIVKQGCWLDINCVDRTDCVEKDSPEVYFCCCGNCKEKSYPPEM 120  
DB 61 FATWNISSISIVKQGCWLDINCVDRTDCVEKDSPEVYFCCCGNCKEKSYPPEM 120  
QY 121 EVTQPTSNVTPKPPYNNILYSLVPLMLIAGIVICAFWYVRRHKKMAYPPVLVPTQDPGP 180  
DB 121 EVTQPTSNVTPKPPYNNILYSLVPLMLIAGIVICAFWYVRRHKKMAYPPVLVPTQDPGP 180  
QY 181 PPPSPLLGLKPLQLLEVKARGFCVWKQAQLNNEYAVKIPIQDKQSNQYEVYSLPG 240  
DB 181 PPPSPLLGLKPLQLLEVKARGFCVWKQAQLNNEYAVKIPIQDKQSNQYEVYSLPG 240  
QY 241 MKHENILOFIGAERKGTSDVDLMLITAFHEKGSLSDFLKNVWSNOLCHIAETMARGL 300  
DB 241 MKHENILOFIGAERKGTSDVDLMLITAFHEKGSLSDFLKNVWSNOLCHIAETMARGL 300  
QY 301 AYLHEDIPLGKHPAISHRDIKSNVLLKNNLTACIADPGLAKFEAGKSAGDTHQGV 359  
DB 301 AYLHEDIPLGKHPAISHRDIKSNVLLKNNLTACIADPGLAKFEAGKSAGDTHQGV 359  
QY 360 GTRRYMAPEVLEGAINFQDAFLRIDMYANGLVWELASRCTAAGDPVDEYMLPPEEIG 419  
DB 360 GTRRYMAPEVLEGAINFQDAFLRIDMYANGLVWELASRCTAAGDPVDEYMLPPEEIG 419  
QY 420 QHPSLDMQEVVYVHKKRPVLRDYWKQKAGMAMLCETIEECWDHDAEARSAGCVGERIT 479  
DB 420 QHPSLDMQEVVYVHKKRPVLRDYWKQKAGMAMLCETIEECWDHDAEARSAGCVGERIT 479  
QY 479 QHPSLDMQEVVYVHKKRPVLRDYWKQKAGMAMLCETIEECWDHDAEARSAGCVGERIT 479  
DB 479 QHPSLDMQEVVYVHKKRPVLRDYWKQKAGMAMLCETIEECWDHDAEARSAGCVGERIT 479

Qy 480 TOMORITNITIEDIVTVVTVMTNVDVPPPKESSL 513  
Db 477 SQIRKSVNGTSDCLSVITSVTVNVDLPPKSSI 510

## RESULT 3

US-10-367-241A-2

; Sequence 2, Application US/10367241A  
; Publication No. US20030219846A1  
; GENERAL INFORMATION:  
; APPLICANT: PFIZER INC.  
; APPLICANT: Krasney, Philip A.  
; APPLICANT: No. US20030219846A1cia, Michael  
; APPLICANT: O'Connor, Barbara A.  
; APPLICANT: Spencer, Robin W.  
; TITLE OF INVENTION: ASSAY FOR ACTIVITY OF THE ACTRIIB KINASE  
; FILE REFERENCE: PC11691A  
; CURRENT APPLICATION NUMBER: US/10/367,241A  
; PRIOR FILING DATE: 2003-02-14  
; PRIOR APPLICATION NUMBER: 60/360,607  
; PRIOR FILING DATE: 2002-02-28  
; NUMBER OF SEQ ID NOS: 2  
; SOFTWARE: Patentin version 3.2  
; SEQ ID NO 2  
; LENGTH: 346  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; US-10-367-241A-2

Query Match 52.5%; Score 1455.5; DB 15; Length 346;

Best Local Similarity 76.1%; Pred. No. 9.4e-118;

Matches 259; Conservative 52; Mismatches 28; Indels 1; Gaps 1;

Qy 176 QDPPPPPPSLGKLPQLLELVKARGFGCVWKAQLLNEYVAVKIPFQDKQSWQNEYEV 235  
Db 8 EDPPPPPPSLGKLPQLLELVKARGFGCVWKAQLMDFVAVKIPFQDKQSWQSEREI 67  
Qy 236 YSPGKMKHENILOFIAEKGSGNLEVEZMLITAFHDKGSLTDYKGNITNWLCHVAET 295  
Db 68 FSPGKMKHENILOFIAEKGSGNLEVEZMLITAFHDKGSLTDYKGNITNWLCHVAET 127  
Qy 296 MARGLAYLHEDIPLGK-DGHKPAISHRDIKSNVLLKNNLTACIADFGALKEPKAGSAG 354  
Db 128 MSRGSLYLHEDVPCWCGEGHKPSIAHRDPKSNVLLKSDLTAYLADFGLAVRPEPKPG 187  
Qy 355 DTHGQVTRRYMAPEVLEGAINFORDAFLRIDMYAMGLVWELASRCTAADGPDVDMPLP 414  
Db 188 DTHGQVTRRYMAPEVLEGAINFORDAFLRIDMYAMGLVWELVSRCKADGPDVDMPLP 247  
Qy 415 FEEIQQHPSLEDMQEVVHKRPVLRDYWKHAGMAMLCETIEBCWDHDAEARLSAGC 474  
Db 248 FEEIQQHPSLELQEVVHKRPVLRDYWKHAGMAMLCETIEBCWDHDAEARLSAGC 307  
Qy 475 VGERITQMORLTNITIEDIVTVVTVMTNVDVPPPKESSL 513  
Db 308 VEERSVLRRSVNGTSDCLSLVSLVTVNVDLPPKSSI 346

## RESULT 4

US-10-108-605-79

; Sequence 79, Application US/10108605  
; Publication No. US20020160934A1  
; GENERAL INFORMATION:  
; APPLICANT: Broadus, Julie  
; APPLICANT: Stam, Lynn  
; APPLICANT: Bachmann, Jane  
; APPLICANT: Kamdar, Kim  
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES FROM DROSOPHILA MELANOGASTER THAT ENCODE  
; FILE REFERENCE: 31133B  
; CURRENT APPLICATION NUMBER: US/10/108,605  
; CURRENT FILING DATE: 2002-03-27

; PRIOR APPLICATION NUMBER: US 09/761,142  
; PRIOR FILING DATE: 2001-01-16  
; PRIOR APPLICATION NUMBER: US 60/176,418  
; PRIOR FILING DATE: 2000-01-14  
; NUMBER OF SEQ ID NOS: 361  
; SOFTWARE: Patentin Ver. 2.1  
; SEQ ID NO 79  
; LENGTH: 516  
; TYPE: PRT  
; ORGANISM: Drosophila melanogaster  
; US-10-108-605-79

## Query Match

41.5%; Score 1150.5; DB 13; Length 516;

Best Local Similarity 47.2%; Pred. No. 4.7e-91;

Matches 249; Conservative 83; Mismatches 152; Indels 43; Gaps 17;

Qy 5 AKLAFAVFLISGSGAILGRSETQCLFFNANWEK--DRTNQ--TGVEPCYGDGDKRRHC 60  
Db 11 AQLTLVCLLIGHGHSILPGSHGIECEHFD--EKVNTTQCCETRIEHCMEADRPSC 67  
Qy 61 PATW--KNISGSIEIVKQCWLDDINCVDRTCCVEKKDSPE--VYPCCEGNCNEKPSY 116  
Db 68 YVLSVNETTGILRIKMKGCFTDMHFC-NQTECVTSABEPQGNHIFCCCKGRCNSNQY 126  
Qy 117 PEE-----MEVTQPTSNPVPKPPYYNILLXSLVPLMLIAGIVICAFWYRHHKMA 167  
Db 127 IKSTTEATTQVPKEXTQDGSNLIY---IYIGTSVESV--LWVIVGM---GLLYRRKQA 178  
Qy 168 YPPVLVPTQDPPPPPPSLGKLPQLLELVKARGFGCVWKAQLLNEYVAVKIPFQDKQ 227  
Db 179 HFNE-IPTHEASITNSPILLSNRPIQLLEQKASGFGDVWQAKLANNQDVAVKIPRQKE 237  
Qy 228 SWONEVYVSLPCMKENILOFIAEKGSGNLEVEZMLITAFHDKGSLTDYKGNITNWLCHVAET 286  
Db 238 SWTHEDIVKLPKMRHPNILEFLGVEKH---MDKPEYWLISYQHGSLCDYLKSHFTSW 294  
Qy 287 NOLCHIAETMARGLAYLHEDIPLGK-DGHKPAISHRDIKSNVLLKNNLTACIADFGAL 345  
Db 295 PELCHIAESMANGLAHLHEEIPASKTDLGKPSIAHRDPKSNVLLKSDLTACTIADFGLAM 354  
Qy 346 KEFACKSGADTHGQVTRRYMAPEVLEGAINFORDAFLRIDMYAMGLVWELASRCTAAD 405  
Db 355 IQQKRPCCDTHGQVTRRYMAPEVLEGAINFORDAFLRIDMYAMGLVWELASRCTAAD 413  
Qy 406 GPVDEYMLPFEEIQQHPSLEDMQEVVHKRPVLRDYWKHAGMAMLCETIEBCWDH 465  
Db 414 GPVGBFQFPFEEIQLRPSLDEVSQVVMKLRPLLNSWRAHPGLNVFCDTMEECWHD 473  
Qy 466 AEARLSAGCVGRITQMORLTNITIEDIVTVVTVMTNVDVPPPKESS 512  
Db 474 AEARLSAGCVGRITQMORLTNITIEDIVTVVTVMTNVDVPPPKESS 513

## RESULT 5

US-10-108-605-157

; Sequence 157, Application US/10108605  
; Publication No. US20020160934A1  
; GENERAL INFORMATION:  
; APPLICANT: Broadus, Julie  
; APPLICANT: Stam, Lynn  
; APPLICANT: Bachmann, Jane  
; APPLICANT: Kamdar, Kim  
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES FROM DROSOPHILA MELANOGASTER THAT ENCODE  
; FILE REFERENCE: 31133B  
; CURRENT APPLICATION NUMBER: US/10/108,605  
; CURRENT FILING DATE: 2002-03-27  
; PRIOR APPLICATION NUMBER: US 09/761,142  
; PRIOR FILING DATE: 2001-01-16  
; PRIOR APPLICATION NUMBER: US 60/176,418  
; PRIOR FILING DATE: 2000-01-14  
; NUMBER OF SEQ ID NOS: 361  
; SOFTWARE: Patentin Ver. 2.1

; SEQ ID NO 157  
; LENGTH: 516  
; TYPE: PRT  
; ORGANISM: Drosophila melanogaster  
US-10-108-605-157

Query Match 41.4%; Score 1147.5; DB 13; Length 516;  
Best Local Similarity 47.8%; Pred. No. 8.5e-91;  
Matches 251; Conservative 83; Mismatches 144; Indels 47; Gaps 19;

QY 11 VFLISC---SSGAIL--GRSTORCLFFFNANWEK--DRTNQ--TGVEPCYGDKDKRHCFA 62  
DB 13 VTLVCLLIGHSILPGSHGIECEHFD---EKMCNTTQOCETRIEHCWEADKPPSCV 59  
QY 63 TW--KNISGIIIVKQGCWLDINCYDRDTCVEKKDSPE--VYPCCBGNMONEKPSVPP 118  
DB 70 LMSVNETTGILRIKQKCFDHEC--NOTECVTSAPROQNIHFCCCKSRCSNQKVIK 128  
QY 119 E-----MEVTOPTSNPTPKPPYNNILYSIPLMLIAGIVICAFVWYRHHKMAP 169  
DB 129 STREATTQPKETQDGSNLIY---IYIGTSVSV--LMVIVGM---GLLLYRRKQAHF 180  
QY 170 PVLVPTQDPPPPPLGLGLKQLLEVKARGFCWCWKAQLLNEYVAVKIPPIQDKQSW 229  
DB 181 NE-IPTHEAEITNSPILLSNRBIQLLEQKASGRFGDVMQAKLNNQDVAVKIFRMQEKESW 239  
QY 230 QNEYEVYSIPGMKHEMILQFICABKRGTSVD--VDLWLTAPHEKGSLSDFKANVVSNNQ 288  
DB 240 TTEHDIYKLPWRHNNILFGLVEXH---MOKPEYWLSTYOHNGSLCDDYKSHSTISWPE 296  
QY 289 LCHIAETMARGLAYLHEDIPGLK--DGHKPAISHRDIKSNVLLKXNLTACIADFLGLKFP 347  
DB 297 LCRIAESMANGLAHLHERIPASKTDLKPSIAHROFKSKNVLLKSDLTACIADFLGLMIF 356  
QY 348 EAGKAGDTHGQVGTGRYMAPSVLEGAINFQDAFLRDMYANGVLVWELASRCTAAADGP 407  
DB 357 QPKPKCGDTHGQVGTGRYMAPSVLEGAINFNFDAFLRDVYACGLVLMWMSVRCDFPA--GP 415  
QY 408 VDEYMLPFEEBIGQPSLEDQEVVVKKKRVLADYDMQKAGMAMLCETIEECWHDHDAE 467  
DB 416 VGEFQLPFEAEIGLRPSLDEQESVVMKKLRRLANSWRAHFGVPCDTEECWHDHDAE 475  
QY 468 ARLSAGCTGERITQORLTNIITTEDIVTVVTVNVTNVPDPKSS 512  
DB 476 ARLSSSCYMERPAQLNKYPS-----TQLLKXNHTNID--DAKEST 513

RESULT 6  
US-10-463-190-111

; Sequence 111, Application US/10463190  
; Publication No. US20040009535A1  
; GENERAL INFORMATION:  
; APPLICANT: Brunkow, Mary E.  
; APPLICANT: Galas, David J.  
; APPLICANT: Kovacevich, Brian  
; APPLICANT: Mulligan, John T.  
; APPLICANT: Paepker, Bryan W.  
; APPLICANT: Van Ness, Jeffrey  
; APPLICANT: Winkler, David G.  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR  
; FILE REFERENCE: 240083.508C2  
; CURRENT APPLICATION NUMBER: US/10/463,190  
; CURRENT FILING DATE: 2003-06-16  
; NUMBER OF SEQ ID NOS: 143  
; SEQ ID NO 111  
; LENGTH: 530  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-463-190-111

Query Match 28.0%; Score 775.5; DB 15; Length 530;

Best Local Similarity 34.5%; Pred. No. 1.7e-58;  
Matches 179; Conservative 103; Mismatches 172; Indels 65; Gaps 19;

QY 7 LAPAVFLISCSGAILGRSETQECLEFENANWEKDR-----TNQTGVEPCYGDKDKRR 58  
DB 14 LPWTILLVSTAAA-----SQNERLCAFPDYQDGLGIGESRISHENGITILC-----SKGS 64  
QY 59 HCPATWKNISSIIRIVKGCWL---DDINCYDRDTCVEKKDSPEVY-----PCCCEGNMC 110  
DB 65 TCYGLWEKSGKIDINLVKQGCWHSIGDPOECH--YBECVVVTTTPPTSTQNTGYRFPCCSTDL 123  
QY 111 NEKES--YFPEMEVTOPTSNPTPKPPYNN---ILYSIPLMLIAGIVICAFVWYRHHKM 166  
DB 124 NVNTEPP-----PPDTPLSP--PHSFNRDETIIILASVSVLAVLILVALCFCGFR---- 173  
QY 167 AYPVLVPTQDPG-----PPPPSPLLGLKPLQLLEVKARGFCWCWKAQLLNEYVAV 218  
DB 174 ---MLTGRKQGLHSMNMEAAAEPSLDLNLKLLLELIGRGYGAIVYKGSLSRDPVAV 229  
QY 219 KIPFIQDKQSWQNEYEVYSIPGMKHEMILQFICABKRGTSVD--VDLWLTAPHEKGSLS 277  
DB 230 KVSFANRQNFINEKNYRVPLMEHDNIAREFVGDERTVADGRMEYLLVMYYTPNGSLCK 289  
QY 278 FLKANVVSNNQCHIAETMARGLAYLHEDIPGLKDGHKPAISHRDIKSNVLLKXNLTAC 337  
DB 290 YLSLHTSDMVSSCRSLAHSVTGLAYLHTELP--RGDHYKPAISHRDLNSRVLVKNDGTCV 348  
QY 338 IADFLGLKFP-----EAGKAGDTHGQVGTGRYMAPSVLEGAINFQ--RDAPLRIDMYA 389  
DB 349 ISDFGLSNRLTGNLVRPGBEDNAAISEVGTGRYMAPSVLEGAINFQ--RDAPLRIDMYA 408  
QY 390 MGLVWLWELASRCT--AADGPVDEYMLPFEEBIGQPSLEDQEVVVKKKRVLADYDMQK 447  
DB 409 LGLIYWEIPEXCTDLFPGBSVPEYQMAFQTEVGNHPTFEDQVLVSRKQRPKPEAWKE 468  
QY 448 HA-GMAMLCETIEECWHDHDAEAPLSAGCVGERITQORL 485  
DB 469 NSLAVRSLKETIEDCWDQDAEARLTQAQCAERMAELMMI 507

RESULT 7

US-10-463-190-112  
; Sequence 112, Application US/10463190  
; Publication No. US20040009535A1  
; GENERAL INFORMATION:  
; APPLICANT: Brunkow, Mary E.  
; APPLICANT: Galas, David J.  
; APPLICANT: Kovacevich, Brian  
; APPLICANT: Mulligan, John T.  
; APPLICANT: Paepker, Bryan W.  
; APPLICANT: Van Ness, Jeffrey  
; APPLICANT: Winkler, David G.  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR  
; FILE REFERENCE: 240083.508C2  
; CURRENT APPLICATION NUMBER: US/10/463,190  
; CURRENT FILING DATE: 2003-06-16  
; NUMBER OF SEQ ID NOS: 143  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 112  
; LENGTH: 530  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-463-190-112

Query Match 28.0%; Score 775.5; DB 15; Length 530;  
Best Local Similarity 34.5%; Pred. No. 1.7e-58;  
Matches 179; Conservative 103; Mismatches 172; Indels 65; Gaps 19;

QY 7 LAPAVFLISCSGAILGRSETQECLEFENANWEKDR-----TNQTGVEPCYGDKDKRR 58  
DB 14 LPWTILLVSTAAA-----SQNERLCAFPDYQDGLGIGESRISHENGITILC-----SKGS 64

```

59  HCPATWKNISGIBIVKOGCWL---DDINCVDRTDCVEKDKSDPEVY-----FCCCEGNMC 110
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
65  TCYGLWEXSKGDIINLVKOGCSHIGDPQECH-YBECVVTTTPPSIQNGTVRFCCSCTDLC 123
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
111 NEKFS-YFPEMEVTOPTSNPVTPKPPVY--ILLYSVLPLMLLAGIVI CAFWVYRHKKM 166
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
124 NVNFTENFP-----PPDTPPLSP-PHSPNRDETIILALASVSLVILVALCFGYR---- 173
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
167 AYPPVLVFPQDRG-----PPPPSPLLGLKPIQLLLEVKARGFCGVCWKAQLLNBYAV 218
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
174 ----MLTGDGRKQGLHSNMNKEBAASPSLDDNLKJLELJGRGYGAVYKGSUDERPVAV 229
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
219 KIFFPDQKOSWONEYBYVYSLGCKHENILQFIGAEGKTSVD-VDLWLTAIHEKGSLS 277
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
230 KYVSPANRNFINEKXIYRVPEMHDNIARIVGDERTADGRWEYLLVNVYTFPNSLCK 289
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
278 FLKANVSVNQULCHIETWARGLAYLHEDI EGLXGDKHPAISHRDIKSNVLLKNLNLATC 337
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
290 YLSLHTSDWVSSCLASHSVTRGLAYLTLP-RGDHYKPAISHRDLNSRVLVXNDGTGV 348
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
338 IADFGALXFP-----EAGKSAGDTHQVGTTRVMAPEVLEGAINFQ--RDAPLRIDMTA 389
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
349 ISDFGLSKMLTGNLVRPCEEDNAAISEVGTIRTVMAPEVLEGAVNLRDCESALKQYDMTA 408
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
390 MGLVLWELASRCT--AADGPVDEYMLPPEBEIGHPSLDMQEVVHKKKRPVLRDYWK 447
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
409 IGLIYWEIPMRCTDLPFCESVPEYQKAPQTEVGNHPTFEDQVIVSREKQRPKPEAWKE 468
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
448 HA-GMMLCETIEECWHDABARISAGCVGERITQMORL 485
Db  : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
469 NSLAVRSIKETIEDCWODABARLTAOCAERMAELAMI 507

```

## RESULT 8

```

US-09-878-905-11
; Sequence 11, Application US/09878905
; Patent No. US20020064786A1
; GENERAL INFORMATION:
; APPLICANT: Markowitz, Sanford D
; APPLICANT: Brattain, Michael G
; APPLICANT: Willson, James K.V.
; TITLE OF INVENTION: CANCER DIAGNOSIS, PROGNOSIS AND THERAPY BASED ON
; TITLE OF INVENTION: MUTATION OF RECEPTOR
; FILE REFERENCE: 062361.0108
; CURRENT APPLICATION NUMBER: US/09/878,905
; CURRENT FILING DATE: 2001-06-13
; PRIOR APPLICATION NUMBER: 08/417,867
; PRIOR FILING DATE: 1995-04-07
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 11
; LENGTH: 567
; TYPE: PRT
; ORGANISM: human
US-09-878-905-11

```

Query Match	28.0%	Score	775.5	DB 9	Length	567	
Best Local Similarity	35.6%	Pred. No.	1.8e-58				
Matches 176: Conservative	82	Mismatches	140	Indels	97	Gaps	15

QY	60	CFATWKNISGSIEIVKQCWLDDINCYD-----RTDCV--EKSDSEPVVF-	102
		: : : : :	
DB	84	CVAWVRKNDENITL-----ETVCHDKPLPYHDFILEDAAAPKCIMKEKKPKGTFEM	135
		: : : : :	
QY	103	CCCEGMNCKEFPFPEMEVTQPSNPVTPKPYPYNILL-----YSLVPLMLTAGIVI	155
		: : : : :	
DB	136	CSCSDECDENIIFSEEYN-----TSNP-----DLLLWIFOWTGISLLPGLVAISVI	183
		: : : : :	
QY	156	CAFVYRHHKMAYPVLVPTODPGPPPP-----SPLLG	188
		: : : : :	
DB	184	IIFYCYRVNRQ---QKLSSTWETOKRLMFESEHCAILLEDRDSISTCANNINHWTE	240
		: : : : :	
QY	189	LKPEQLLEVKGARFGCVWKQAQLLN-----EVAVVKIPPIQDKSQWNEYEVYSLPGMK	242

Db	241	LPILIEDTLVGREPAEYVYKALKONTSEQETVAVKIFPYEYVASMKTEDIFPSDINLK	300
Qy	243	HENLIQFIGAEKRGTSVDVDLWLITAFHEKSGISDFLKANVVSNNQIUCHIAETMARGLAY	302
Db	301	HENLIQFLTAEBEKTELQGYWLITAFHAKGNLOEYLITREVISWEDRLKLGSSLAGIAH	360
Qy	303	LHEDIPLGKDGHKA-----ISHRDIKSKNVLLKNMLTACIADFGLALFRAEKGAGD-	355
Db	361	LHSD-----HTPCGRPKMPVIRDLKSSNIVKNDLTCCLCDPGLSLRLDPTLSVDLL	413
Qy	356	-THGQWSTERYMAPSVLEGANFOR-DAFLIDYANGVLVLELASRCTYAADGPVDEYML	413
Db	414	ANSQGUGTARYAPVPSVLSRNNLENRASFKQTDVYSALVINMETSRGNAY-GEVKDYEY	472
Qy	414	PPEEBIGQHPSLDMQEVVHHKKRQPVLRVYQKGAQMAMLCETIBECWDHDAEAKLSAG	473
Db	473	PGFSKVRHPCVESMKDVLSDRGPRIPSPFWLNHQIQMVCEITLTETCWDHDPPEARLTAQ	532
Qy	474	CVGERITQWQLRTNI	488
Db	533	CVAEERFSLEHLDRL	547

## RESULT 9

```

US-10-646-640-11
; Sequence 11, Application US/10646640
; Publication No. US20040038284A1
; GENERAL INFORMATION:
; APPLICANT: Markowitz, Sanford D
; APPLICANT: Brattain, Michael G
; APPLICANT: Willson, James K.V.
; TITLE OF INVENTION: CANCER DIAGNOSIS, PROGNOSIS AND THERAPY BASED ON
; TITLE OF INVENTION: MUTATION OF RECEPTOR
; FILE REFERENCE: 062361.0108
; CURRENT APPLICATION NUMBER: US/10/646,640
; CURRENT FILING DATE: 2003-08-21
; PRIOR APPLICATION NUMBER: US/09/878,905
; PRIOR FILING DATE: 2001-06-13
; PRIOR APPLICATION NUMBER: 08/417,867
; PRIOR FILING DATE: 1995-04-07
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 11
; LENGTH: 567
; TYPE: PRT
; ORGANISM: human
US-10-646-640-11

```

Query Match	28.0%	Score	775.5;	DB 12;	Length	567;
Best Local Similarity	35.6%	Pred.	No. 1.8e-58;			
Matches	176;	Conservative	82;	Mismatches	140;	Indels
						97;
						Gaps
						15

[illegible]





```
US-09-917-788-5
; Sequence 5, Application US/09917788
; Publication No. US20030028905A1
; GENERAL INFORMATION:
; APPLICANT: KNAUS, Petra
; APPLICANT: KNAUS, Rainer
; TITLE OF INVENTION: MUTANT FORMS OF THE TGF-BETA TYPE II RECEPTOR WHICH BIND ALL TGF-
; TITLE OF INVENTION: ISOFORMS
; FILE REFERENCE: 38485-0005
; CURRENT APPLICATION NUMBER: US/09/917,788
; CURRENT FILING DATE: 2001-07-31
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Mutant TGF-beta type II receptor
US-09-917-788-5

Query Match      28.0%; Score 775.5; DB 10; Length 592;
Best Local Similarity 35.8%; Pred. No. 28-58;
Matches 176; Conservative 82; Mismatches 140; Indels 97; Gaps 15;

QY 60 CFATKNISSGSIIVKQGWLDINCVD-----RTDCV--EKXDSPEVVF- 102
DB 109 CVAVWRKNDNIYL-----ETVCHDPKLPYHDFILEDAASPKIMKSKKPGGTFFM 160
QY 103 CCCEGMNCKEYSYFPEMEVQTSPNTPKPPYNYILL-----YSLVPLMLAGIIV 155
DB 161 CSCSDCECDNIIFSEYN-----TSNP-----DLLLVFQVTVGISLLPLGVAISVI 208
QY 156 CAFVYRKHKMAYPVVLVPTQDPGPPPP-----SPLLG 188
DB 209 IIFYCYRVNRQ---QKLSSTWEGTKRKLKRFSEHCAIILEDSDISSTCANNINHT 265
QY 189 LKPLQLLEVKARFCGVKWAQLLN-----EYVAVKIPIDQKQWQNEVEYVSLPGMK 242
DB 266 LLPFIEDTLVGRFAEVYKAKLKQNTSEQFETVAVKIPYREYASWKEKDIFSDINLK 325
QY 243 HENILOFIGAERKGTSDVDLMLITAPHEKGSLSDFLKANVSNWOLCHIAETMARGLAY 302
DB 326 HENILOFLTABEKTELGQYWIITAFHAKGNLOEYLTTHVISNEDRLKLGSSLAGIAH 385
QY 303 LHEDIPGLKDHKPA-----ISHRDIKSNVLLKNLITACIADFGIALKFAKGSAGD- 355
DB 386 LHSDD-----HTPCGRPKMPIVHRDLKSNILVKNDLTCCLCDFGLSLRLDPTLSVDL 438
QY 356 -THGQVGTARYMAPEVLEGAINFOR-DAFLRIDMYAMGLVILWELASRCTAAGDPVDEYML 413
DB 439 ANSGQVGTARYMAPEVLEGRMNLNLAESFKQTDVYSMALVLEWMTSRNAV-GEVKDYEP 497
QY 414 PPEETIGQPSLEDMEQVHVHKKRPVLRDYMOKHAGMAMLCETIECDHDAEARLSAG 473
DB 498 PGSKYREHPCEVSMKDNVLRDGRPEIFSPFLNHQGIQWCVETLTCDHDPPEARLTQA 557
QY 474 CVGERITOMQRLTNI 488
DB 558 CVAERFSELEHDLRL 572

RESULT 13
US-09-908-500A-2
; Sequence 2, Application US/09908500A
; Patent No. US20020102576A1
; GENERAL INFORMATION:
; APPLICANT: James Loyd
; APPLICANT: Kirk B. Lane
; APPLICANT: John A. Phillips, III
; TITLE OF INVENTION: METHOD OF DIAGNOSING PULMONARY
; TITLE OF INVENTION: HYPERTENSION
; FILE REFERENCE: 22000.010803
```

```
; CURRENT APPLICATION NUMBER: US/09/908,500A
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 60/218,740
; PRIOR FILING DATE: 2000-07-17
; PRIOR APPLICATION NUMBER: 60/220,133
; PRIOR FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 1038
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-09-908-500A-2

Query Match      28.0%; Score 775.5; DB 9; Length 1038;
Best Local Similarity 34.5%; Pred. No. 4.1e-58;
Matches 179; Conservative 103; Mismatches 172; Indels 65; Gaps 19;

QY 7 LAFAPVELISCSGAILGRSETQECL-FFNANWEKDR-----TNQTGVPCYGDKDKR 58
DB 14 LPWTILLAVSTAAA-----SQQERLCFAKDPVQQDLGIGESRISHENGITLC- 64
QY 59 HCFATWKNISGSIIVKQGWL---DDINCVDRTDCVKKOSPEVY-----FCCCEGNMC 110
DB 65 TCYGLWKSXKGINLVKQGWSHIGDPQECH-YEECVVTTTPPSIQNGTYRCCCSCTDLC 123
QY 111 NEKFS-YFPEMEVTOPTSNPVPKPPYNN---ILLYSLVPLMLIAGIVICAFWVYRHHKM 166
DB 124 NVNFTENFP-----PPDTTFLSP-PHSFNREDTIIIIILASVSVLAVLVALCFGYR- 173
QY 167 AVPPVLVPTQDPG-----PPPSPLLGKLPQLLEVKARGFCGVKWAQLLMEYVAV 218
DB 174 ---MLTGDRKQGLSHMMNMEAASEPSLDLNLKLELIGRGYGAIVYKGSLSDRPVAV 229
QY 219 KITPFIQDKSQWNEVEYVSLQMKHENITLOPTGAKRGTSVD-VDLMLITAPHEKGSLS 277
DB 230 KVFSPANQNFINEKVIYRVPLMEHDNIARIVGDERVTADGRMEYLLWMEYYPNGSLCK 289
QY 278 FLKANVWGNQLCHIAETMARGLAYLHEDI-PGLKDHGKPAISHRDIKSNVLLKNLITAC 337
DB 290 YLSLHTSDWSSCLSAHSVTRGLAYLHTLP-RGDHYKPAISHRDLNRSNVLVKNDDGTCV 348
QY 338 TADFGLALKF-----EAGKSGDTHGOVGTERRYMAPEVLEGAINFO--RD AFLRIDMYA 389
DB 349 ISDFGLSMRLTCNLRVRFGEEDNAAISEVGTIRYNAPVLEGAVALNRCESALKQVDMYA 408
QY 390 MGLVLEWELASRCT--AAGDPVDEYMLPFEETIGQPSLEDMEQVHVHKKRPVLRDYMOK 447
DB 409 LGLIYWEIFMRTDLPFGESVPEYQMAFQTEVGNHPTFEDMQVLVSRKQKPFPEAWKE 468
QY 448 HA-GVAMLCETIEBECWDHDAEARLSAGCVGERITOMQRL 485
DB 469 NSLAVRSUKETIEDCWDQDAEARLTAQACABERMAELMMI 507

RESULT 14
US-10-286-152A-42
; Sequence 42, Application US/10286152A
; Publication No. US20030134308A1
; GENERAL INFORMATION:
; APPLICANT: Alcon Research, Ltd.
; APPLICANT: Clark, Abbot F.
; TITLE OF INVENTION: Bone Morphogenic Proteins (BMP), BMP Receptors and BMP Binding
; TITLE OF INVENTION: and Their Use in the Diagnosis and Treatment of Glaucoma
; FILE REFERENCE: 2312 US
; CURRENT APPLICATION NUMBER: US/10/286,152A
; CURRENT FILING DATE: 2002-02-28
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 42
; LENGTH: 1038
; TYPE: PRT
; ORGANISM: homo sapiens
```

US-10-286-152A-42

Query Match 28.0%; Score 775.5; DB 14; Length 1038;  
Best Local Similarity 34.5%; Pred. No. 4.1e-58;  
Matches 179; Conservative 103; Mismatches 172; Indels 65; Gaps 19;

QY 7 LAPAVFLISCSGAILGRSETOECL-FFNANWEKOR-----TNQTGVEPCYGDKXER 58  
DB 14 LPWTILLVSTAA-----SQNERLCAPKDPYQODLIGIGESRISHENGTLIC-----SKGS 64  
QY 59 HCFATWKNISGIEIVKQGCWL---DDINCYDRTDCVEKKDSPEVY-----FCCCEGNNC 110  
DB 65 TCYGLWEKSKGDLNLVQGCWSHIGDPQECH-YEECVVTTTTPSIQNGTYRFCCCSIDL 123  
QY 111 NEKES-YFPEMEVTOPTSNPTPKPPYN---ILLYSLVPLMLIAGIVICAFVYRHHXN 166  
DB 124 NNFNTEFP-----PPDTPLSP-PHSFNRDETHIIALASVSLVALIIVALCFGYR---- 173  
QY 167 AYPVLPVPTQDPG-----PPPPSLGLKPLQLLEVKARGFCVCKAQLLNEYVAV 218  
DB 174 ----MLTGRKQGLHSMNMWEEAASEPSLDLNLKLELIGRGYGVAVYKGSLSLDERP 229  
QY 219 KIPPIODKQSWNEYEYSLPGMKHENILOFGAEKRGTSVD-VDLWLITAFHEKGSLS 277  
DB 230 KVFSFANRQNFINEKNIYRVLMEHDNIARFIVGDERVTADGRMEYLLVMEYYPNGSL 289  
QY 278 FLKANVVSNNQCHIAETMARGLAYLHEDIPLGKDGHPKPAISHROIKSNVLLKXNLTAC 337  
DB 290 YLSLHSDWSSCRLAHSTVRLGLAYLHTELP-RGDHYKPAISHRDLNSRNLVKNRGTCV 348  
QY 338 IADFGALALP-----EAGKSAGDTHQGVGTRRYMAPEVLEGAINFQ--RDAFLRIDMYA 389  
DB 349 ISDFGLSMRLTGNRLVRPGEEDNAAISEVGTIRYMAPEVLEGAVNLRDCESALKQDMYA 408  
QY 390 MGLVWLWELASRCT--AADGPVDEYMLPFEETIGQHPSLDMQEVVVKKKRPVLRDYQK 447  
DB 409 LGLIYWEIFMRCTDLFPGESVPEYQAFQTEVGNHFTFEDMQVLVSRKQRPKPEAWKE 468  
QY 448 HA-GMAMLCETIEECWDHDAEALRSAGCVGERITQMORL 485  
DB 469 NSLAVRSJKETIEDCWDQDAEARLTAQCAEERMAELMMI 507

## RESULT 15

US-10-463-190-113  
; Sequence 113; Application US/10463190  
; Publication No. US20040009535A1

## GENERAL INFORMATION:

; APPLICANT: Brunkow, Mary E.  
; APPLICANT: Galas, David J.  
; APPLICANT: Kovacevich, Brian  
; APPLICANT: Mulligan, John T.  
; APPLICANT: Paepel, Bryan W.  
; APPLICANT: Van Ness, Jeffrey  
; APPLICANT: Winkler, David G.  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR  
; TITLE OF INVENTION: INCREASING BONE MINERALIZATION  
; FILE REFERENCE: 240083.508C2  
; CURRENT APPLICATION NUMBER: US/10/463,190  
; CURRENT FILING DATE: 2003-06-16  
; NUMBER OF SEQ ID NOS: 143  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 113  
; LENGTH: 1038  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-463-190-113

Query Match 28.0%; Score 775.5; DB 15; Length 1038;  
Best Local Similarity 34.5%; Pred. No. 4.1e-58;  
Matches 179; Conservative 103; Mismatches 172; Indels 65; Gaps 19;

QY 7 LAPAVFLISCSGAILGRSETOECL-FFNANWEKOR-----TNQTGVEPCYGDKXER 58

DB 14 LPWTILLVSTAA-----SQNERLCAPKDPYQODLIGIGESRISHENGTLIC-----SKGS 64  
QY 59 HCFATWKNISGIEIVKQGCWL---DDINCYDRTDCVEKKDSPEVY-----FCCCEGNNC 110  
DB 65 TCYGLWEKSKGDLNLVQGCWSHIGDPQECH-YEECVVTTTTPSIQNGTYRFCCCSIDL 123  
QY 111 NEKES-YFPEMEVTOPTSNPTPKPPYN---ILLYSLVPLMLIAGIVICAFVYRHHXN 166  
DB 124 NNFNTEFP-----PPDTPLSP-PHSFNRDETHIIALASVSLVALIIVALCFGYR---- 173  
QY 167 AYPVLPVPTQDPG-----PPPPSLGLKPLQLLEVKARGFCVCKAQLLNEYVAV 218  
DB 174 ----MLTGRKQGLHSMNMWEEAASEPSLDLNLKLELIGRGYGVAVYKGSLSLDERP 229  
QY 219 KIPPIODKQSWNEYEYSLPGMKHENILOFGAEKRGTSVD-VDLWLITAFHEKGSLS 277  
DB 230 KVFSFANRQNFINEKNIYRVLMEHDNIARFIVGDERVTADGRMEYLLVMEYYPNGSL 289  
QY 278 FLKANVVSNNQCHIAETMARGLAYLHEDIPLGKDGHPKPAISHROIKSNVLLKXNLTAC 337  
DB 290 YLSLHSDWSSCRLAHSTVRLGLAYLHTELP-RGDHYKPAISHRDLNSRNLVKNRGTCV 348  
QY 338 IADFGALALP-----EAGKSAGDTHQGVGTRRYMAPEVLEGAINFQ--RDAFLRIDMYA 389  
DB 349 ISDFGLSMRLTGNRLVRPGEEDNAAISEVGTIRYMAPEVLEGAVNLRDCESALKQDMYA 408  
QY 390 MGLVWLWELASRCT--AADGPVDEYMLPFEETIGQHPSLDMQEVVVKKKRPVLRDYQK 447  
DB 409 LGLIYWEIFMRCTDLFPGESVPEYQAFQTEVGNHFTFEDMQVLVSRKQRPKPEAWKE 468  
QY 448 HA-GMAMLCETIEECWDHDAEALRSAGCVGERITQMORL 485  
DB 469 NSLAVRSJKETIEDCWDQDAEARLTAQCAEERMAELMMI 507

Search completed: June 28, 2004, 09:50:28

Job time : 51 secs